

THE WOOL PRESS

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Telephone +500 27355

Fax +500 27352

sferguson@doa.gov.fk

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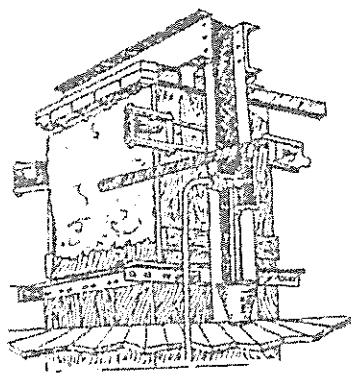
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Plus all the usual features and more!!



Edited by Siân Ferguson

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EDITORIAL

July is fast approaching and Farmers' Week is just around the corner. We've had a fairly wintery spell just recently and some cold nights – just the right conditions to sit down in the evening and browse through your latest Wool Press.

Ian Campbell starts the ball rolling with an article on grazing management, in which he tries not to be too contentious for fear of losing any friends he may have out there! I think most of what he says is good common sense but I'll leave you to make your own judgements on that.

Tony Mills takes a look at new season lambs of differing breeds to see whether there is any major difference between them at slaughter. The conclusion appears to be that there are differences within the breeds as well as between them but the differences are not significant. It is quite noticeable that the heavier carcasses are mainly found in the SAMM x Polwarth lambs but as Tony points out a heavier carcass doesn't automatically mean a higher grade as grading takes into account fat cover as well as weight. This is where condition scoring of your live animals prior to sending them off to the abattoir comes into play.

There are 2 short veterinary articles in this month's Wool Press – one on worming puppies by Zoë Luxton and one on neutering dogs by Susan Campbell. Both are worth a read.

The farm in profile this month is Rincon Ridge; Leon and Helen have certainly managed to reduce the fibre diameter considerably but as they say in their penultimate paragraph that hasn't resulted in greatly increased fleece values although other farm related costs have increased significantly during that period. The cost/price squeeze is what farmers are continually up against and stay in business by adapting new technology and management methods - such as reducing micron and improved grazing management etc.

The final section of the Wool Press is devoted to the programme for the upcoming Farmers' Week. Please read this carefully and we hope to see you in the Town Hall (and at other venues) throughout that week.

Keep warm and stay healthy (no sign of any swine flu here yet – but I'm sure it will arrive at some stage).

Have a good Farmer's Week.

Regards,

Steve Pointing
Senior Veterinary Officer

NOTICE

Due to increased costs, unfortunately we have had to raise the cost of each Wool Press. From August, each issue will be £1.25

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GRAZING MANAGEMENT - WHAT'S IT ALL ABOUT?

By Ian Campbell

In my time in agriculture I have noticed there are only two sheep related issues that will provoke a friendship ending debate. The one I want to talk about today is Grazing Management.

Just for the record the other one is sheep breeding - but we will leave that for another day if I still have any friends left.

What do we mean by grazing management?

It's pretty simple. Which flocks have access to which areas and for how long. There are as many grazing management systems as there are farms. The extreme examples are set stocking - a mob on a paddock for the whole year; and strip grazing - where a feed resource is fed out with an electric fence for a short period of time - as little as hours. Then there is every permutation in between.

Obviously it is a bigger issue than this. Drafting into mobs - weaning lambs, drafting out the weak or better animals are also part of the overall science (or art?) of grazing management.

The overall stocking rate on the farm and the specific stocking rate on areas are also part of it. So too is timing of lambing, weaning and selling of livestock.

When it comes to stating the ideal type of grazing management system I personally like to sit on the fence; (not the type of fence used for strip grazing!). I do however feel very strongly that the system should be well planned, well designed, and that it should only be adopted if the goals set for the farm are achievable by this grazing management system.

Grazing Management Goals

There are a number of farm goals that are directly affected by grazing management systems and each need to be considered. Sometimes the goals are in conflict and this needs to be thought through carefully.

For example there might be a time where a flock needs a good shot in the arm of high quality feed, but the freshly sown reseed that can provide this needs a good spell to become firmly established.

So the simple solution to grazing management issues is to develop a system for your farm that will do the best for you taking into consideration the following factors.

The Needs of the Animals

Water, nutrition, freedom from hazards like ditches and reefs are all important considerations. So too is not putting lambs next to their mums, bulls next to heifers and so on. Sheep are selective grazers and having access to some nice greens or reseeds will give animals an extra nutritional boost. Most Falkland Island camps are well described in this sense; ewe camps, hog camps or wether camps.

The simple concept of rationing is an important factor in the decision. Do we eat it all off now or lock it up for later. Pregnant and lactating animals need more feed, as do young growing animals. In the Falkland Islands quality rather than quantity on offer is the major factor controlling

nutrient intake.

Is there good shelter for lambing as well as nutrition for lambing ewes? Is the size large enough to see the mob through to the end of lambing?

Disease Control

Worms in particular are picked up from contaminated pasture. Spelling periods to kill worm larvae are high (months) but achievable in some systems. Strategic drenching before a move, keeping contaminated stock off areas, using different classes or especially species of animals in turn, and simply letting the grass growth dilute larval intake will all help in parasite control.

Knowing sufficient history to declare a paddock clean or contaminated is vital, particularly when moving or drenching stock.

The Needs of the Plants

Plants respond differently to grazing. Tussac will be eaten out of set stocked areas whereas Whitegrass will survive and thrive. Understanding the length of time a plant needs to be spelled is vital to the system. Some areas respond exceptionally well with a very good chew out (hoof and tooth) and others do not, so this becomes a vital factor in the decision.

Some plants get a bit rank, and tying up both minerals and space, and animals need to be forced to eat them so the resources can be used for growth once again.

Summary

There is no prescriptive answer other than to understand the needs of the farm and create a system that works for you. Just putting in fences and moving stock around is a gross oversimplification. The right grazing management system will bring out the best in both the livestock and the farm - and with the right design should be very time efficient as well.



NEW SEASON LAMB – ARE THERE BREED DIFFERENCES?

By Tony Mills

An opportunity to gather some objective information from the slaughter of different breeds of lambs was taken in April. Kenneth and Josie McKay (Sheffield – West Falkland) delivered to the abattoir a line of New Season Lambs (NSL) representing four different breeds. The following is a summary of these results.

This was not the whole drop and they were all wether lambs. The dams were Polwarth ewes with the following breeds used as sires – Suffolk, Poll Dorset, SAMM and Polwarth. The Suffolk and Poll Dorset sires were first cross meaning they were approximately 50% Suffolk or Poll Dorset and 50% Polwarth. This means that the progeny are the result of a backcross and would be classified as being approximately 25% Suffolk or Poll Dorset. This is sometimes referred to as the F2 generation (second cross). The SAMM and Polwarth sires were purebreds.

The lambs were all run on a predominately Whitegrass pasture with approximately 10 – 20% of the pasture containing fine grasses. No improved pasture or crops were used to finish these

animals. Additionally there were no delays during the animal's delivery to slaughter and they spent approximately 12 hours in lairage with access to water (wet curfew).

Because of on-farm constraints the SAMM x Polwarth and Polwarth lambs were unable to be identified separately and have therefore been killed and classified as one lot.

Table 1 represents the average dressing percentage (DP%), dressed weight (DWT - cold carcass weight), carcass grade and value per head from the different groups. The SAMM cross and pure Polwarth group have a slightly higher average DWT which translates into a slightly higher value per head. However I don't believe it to be that large a difference that you could state it to be 'significant'. There is also a difference of 2% in dressing percentage between the Suffolk cross group and the SAMM cross and pure Polwarth group. Again this would still not be a 'significant' difference.

The standard deviation is a statistical measure used to explain the spread of data being examined. This has been calculated for each measured characteristic and is displayed in italics below the mean. It is expressed in the same units as the measured characteristic (e.g. Kg or £).

The data for the Suffolk cross group shows the following:

- DWT - 68% of the animals weighed between 9.27 Kg and 11.29 Kg and 95% of the animals weighed between 8.26 Kg and 12.30 Kg;
- Grade – 68% of the animals were graded between 2 and 3
- Value – 68% of the animals were worth between £11.95 and £15.49 and 95% were worth between £10.18 and £17.26.

The data for the Poll Dorset cross group shows the following:

- DWT - 68% of the animals weighed between 9.23 Kg and 11.29 Kg and 95% of the animals weighed between 8.20 Kg and 12.32 Kg;
- Grade – 68% of the animals were graded between 2 and 3
- Value – 68% of the animals were worth between £11.65 and £15.53 and 95% were worth between £9.71 and £17.47.

The data for the SAMM cross and pure Polwarth group shows the following:

- DWT - 68% of the animals weighed between 9.23 Kg and 12.29 Kg and 95% of the animals weighed between 7.70 Kg and 13.82 Kg;
- Grade – 68% of the animals were graded between 2 and 3
- Value – 68% of the animals were worth between £11.70 and £16.82 and 95% were worth between £9.14 and £19.38.

The data above demonstrates that there is reasonable variation around the average of each of the measured characteristics. This data will be slightly skewed given that the whole drop is not represented however it is similar to what we would expect in any normal population (i.e. this demonstrates the normal distribution). This variation can translate into real benefits as the producer can exploit this variation through selection and management.

Table 1. Average dressing percentage (DP%), dressed weight (DWT), carcass grade and value (£).

BREED	AV DP	AV DWT	AV GRADE	AV VALUE
	%	Kg		£
SUFFOLK X	38	10.28	2.6	£13.72
		<i>1.01</i>	<i>0.53</i>	<i>£1.77</i>
POLL DORSET X	39	10.26	2.51	£13.59
		<i>1.03</i>	<i>0.58</i>	<i>£1.94</i>
SAMM X + POLWARTH		10.76	2.55	£14.26
	40	<i>1.53</i>	<i>0.6</i>	<i>£2.56</i>

Note: The number in italics represents the standard deviation of the measured characteristic.

Table 2 presents the FIMCo weight categories and the proportion of animals in each category. The categories with the highest proportion are the 9.0 – 9.9 Kg and 10.0 – 10.9 Kg. This is across each of the breeds. It is interesting to note that in the SAMM cross and pure Polwarth group that there is a small proportion that were in the higher weight categories. Even though the SAMM cross progeny were unable to be unequivocally identified from the pure Polwarth progeny, based on key visual characteristics (wool length, wool style & frame) both Kenneth and myself are fairly confident that these heavy animals were the SAMM cross progeny. It is also worth noting that recent discussions with FIMCo identified that depending on the markets an ideal carcass weight would be fall between 11.0 Kg and 15.0 Kg. This would allow them to meet their customers cut specifications.

Table 2. Proportion (%) of carcasses within the FIMCo dressed weight categories.

DWT (Kg)	SUFFOLK X	POLL DORSET X	SAMM X + POLWARTH
Category			
< 9.0	5.56	8.7	8.84
9.0 - 9.9	35.19	38.4	27.62
10.0 - 10.9	40.74	30.43	25.97
11.0 - 11.9	14.81	17.39	16.57
12.0 - 12.9	1.85	3.26	12.15
13.0 - 13.9	1.85	2.17	6.08
14.0 - 14.9			1.1
15.0 - 15.9			1.1
16.0 - 16.9			0.55

Table 3 shows the proportion of carcasses that fit within each of the MLC grades now used at FIMCo. Table 4 also relates to the grading method used and shows the range of carcass weights that fell within each grade. The good picture is that the highest proportion of carcasses graded as 3L or 3H's. However over one third of the carcasses are still in the 2 grade.

While I appreciate that this would meet the minimum requirement, I am sure that the better quality product would come from the next grade up. As noted above there were some heavier carcasses within the SAMM cross and pure Polwarth group. Both Table 3 and 4 demonstrate that these carcasses also meet the higher grade standards.

Table 4 demonstrates that not only the heavier carcasses fit into the higher fat class. This is what we would expect and this is why condition scoring your animals is a simple tool that can be used to give you a better result over the hook. If you were to just draft on eye and expect the bigger framed animals will give you the best result for weight and grade then you may well be disappointed. The feedback sheets that FIMCo return to you allow you the ability to analyse your kill and then relate this back to animal selection and management. The net result should be that the next time animals are sent for slaughter then more dollars are received for the effort put in.

Table 3. Proportion (%) of carcasses in each grade.

BREED	SUFFOLK X	POLL DORSET X	SAMM X + POLWARTH
GRADE			
1	1.85	4.35	4.42
2	35.19	40.22	37.57
3	62.96	55.43	56.91
4			1.1

Table 4. Range of dressed weights within each grade.

BREED	SUFFOLK X	POLL DORSET X	SAMM X + POLWARTH
GRADE			
1	8.34	8.63 - 8.92	7.76 - 10.57
2	8.83 - 10.77	8.63 - 11.35	7.95 - 12.03
3	9.12 - 13.58	8.83 - 13.39	9.22 - 15.91
4			13.68 - 16.00

Seen anything strange lately?!



“Hey Zoe, I’m ready for the next ewe now.”

**DON'T LEAVE IT...
...OR SHOOT IT**

**Call the Veterinary
Section on 27366**

**ACTIVE
SURVEILLANCE
IS OUR BEST
DEFENCE!!**

Worming Pups

By Zoë Luxton

As you all know the legislation with regard to hydatid control states that you must start worming dogs at 6 months of age. However, at a much younger age than this, pups will be eating meat and in contact with areas that sheep will graze. Thus they are able to spread *T.ovis* (the worm that causes bladder cysts) and will also have the same theoretical risk of any adult dog for spreading *E. granulosus*, the worm that causes hydatids. These worms are TAPEWORMS.

Droncit only kills tapeworms.
Drontal kills tape and round worms.

All puppies and kittens have roundworms and it is good practice to worm any bitch or queen 2 weeks before she has a litter and 2 weeks after. This is especially important if you have young children as some round worms e.g. *Toxocaris spp.* can cause disease and even blindness in infants.

Drontal can be used from 2 weeks of age in young animals and is safe to repeat as often as every fortnight. To prevent the risk of dogs younger than 6 months spreading hydatids and to improve the health of your young dogs and protect the health of your family the following is highly recommended:

- 1) Worm bitches with **DRONTAL** 2 weeks before they pup.
- 2) Worm the bitch again and all the pups at 2 weeks old with **DRONTAL** (1/4 tablet per pup or if very small pups that are well under 2kg get some Panacur wormer from the Vets office).
- 3) It is advisable to worm the pups every 2-4 weeks with **DRONTAL** until they are 3 months old and then routinely dose them within your adult dog regime.

The dose rate for **drontal and droncit** is 1 tablet per 10kg bodyweight.

When you ring/fax/email in on dog dosing day to say your dogs have been dosed we would be very grateful if you could let us know if you have a litter of pups on the property or have recently re-homed pups to farms or town, or if you have received a new pup that is not yet 6 months old. This just helps keep the dog lists running smoothly and saves confusion. Your continuing cooperation is always appreciated.

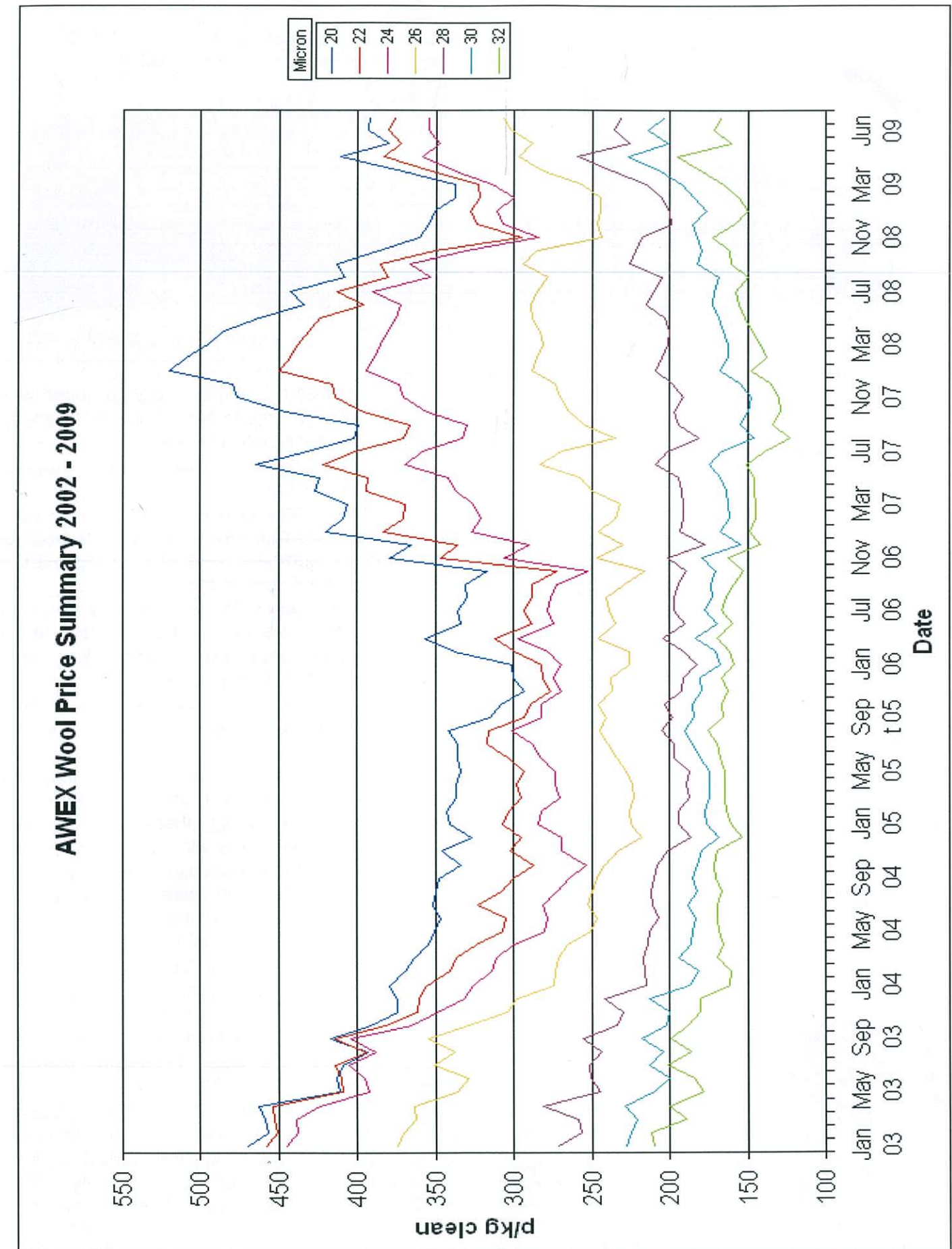
**IMPORTANT
NOTICE**

There has been reported sightings of a black collie cross stray dog between the New House and Greenfield turn off in the North Camp of East Falkland.

If anyone has lost a dog or sighted this (or any) stray dog, please contact the Veterinary Services on 27366 or 55366.

WOOL PRICE TREND OVER TIME

Based on weekly DoA Wool Reports



FARM IN PROFILE: RINCON RIDGE

Property Name: Rincon Ridge
Location: Fox Bay, West Falklands
Owners: Leon Marsh & Sammy Marsh
Farm Size: 13,125ha
Sheep: 7,846
Cattle: 8

Leon went into farming because he liked the way of life, having previously worked as a shepherd since finishing his education. The farm was bought in 1986 when Fox Bay West was sub-divided and sold by the Falkland Islands Company. Leon shares ownership of the farm with eldest daughter Sammy. He lives at Rincon Ridge with his wife Helen and youngest daughter Abigail.

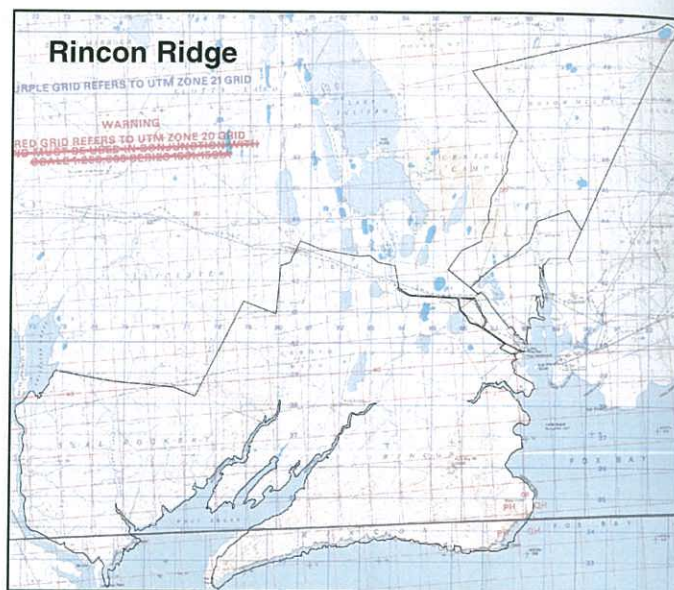
The sheep at Rincon Ridge

When the farm was purchased in 1986, they were advised by Colin Smith (selling agent at that time) to produce finer wool and so Leon started purchasing Polwarth rams from Pickthorne, and some Merino sheep from Dunnose Head. In recent years he has bought Dohne Merinos from Andrez Short at Swan Inlet. Leon feels at this time that pure bred Merinos of any type are too 'soft' to thrive on Rincon Ridge, but is more optimistic about introducing Dohne genetics more gradually and have purchased half bred rams to begin this process.

Rincon Ridge wool has become significantly finer over the years, and they are pleased that alongside this, fleece weights increased initially and have since remained stable. In the first season (1987/1988) 17,127 kg was produced by 4,797 sheep, an average of



Leon with his dogs with the settlement behind



3.57 kg per head. The most wool produced was in 1998/1999 when 37,052kg from 9,341 sheep (3.96 kg per sheep) was shorn.

In 2008/2009 there was 28,024kg produced from the 7,456 sheep shorn (3.75kg per head). Leon believes this is a more realistic number of sheep for the farm to hold as when sheep numbers were at their highest the camps could not sustain them.

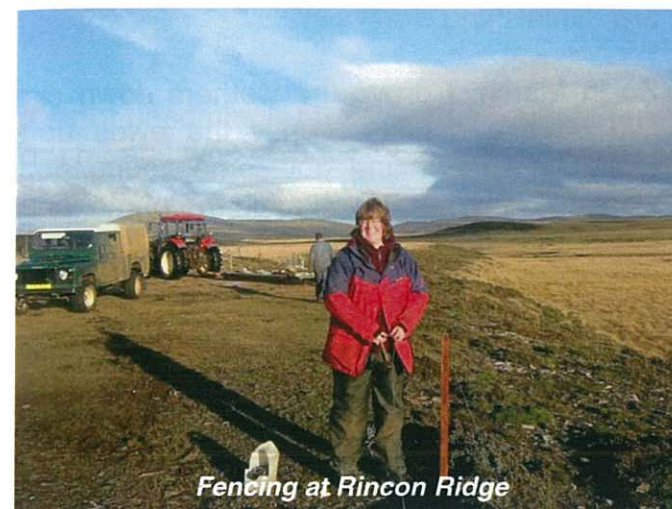
Lambing percentages have been poor in the last few years, probably due to a combination of poorer weather and lack of grass growth during the spring and summer.

For the first time, Leon (along with wife Helen) has been paying extra attention to the effect of parasites on the sheep and have taken measures to reduce the loads. Mainly by spelling the ewe camps, drenching all lambs at weaning and releasing them onto spelled camps. The ewes are also all drenched at shearing time (and released into clean camps).

Leon tries to send sheep to the abattoir each season, but only wethers as the farm is unable to produce 'surplus' new season lambs of an adequate weight. They feel that their young sheep only really begin to gain significant weight after being shorn as hoggets.

Pasture improvement work has been undertaken for the past 14 years, planting re-seeds only at first, then adding crops for the last four years. This year they felt their swede crop was a success, with some swede bulbs weighing as much as 5kilos. Oats also grow well at Rincon ridge and seem to do well regardless of the weather. Crops and re-seeds are used for a variety of purposes.

FARM IN PROFILE: RINCON RIDGE



Fencing at Rincon Ridge

Other Work and the future

Along with running Rincon ridge, Leon and Helen also work Lake Sullivan sheep and have supplied mutton for PWD road gangs for the past eight years. They also maintain the Fox Bay West minefields, and undertake road haulage (over 300 hours per year!). This work has been varied, including shifting calcified seaweed, sheep for the abattoir, moving road camps, wool, etc. They also house the occasional visitor.

On Rincon Ridge there is only a few cattle (7) with a Canadian Shorthorn bull. Beef is produced only for home consumption and they currently have no plans to change this approach at the moment.

Leon believes that Rincon Ridge has attractive scenery, along with good trout fishing on the Malo and penguin rookeries in several locations.

As for the future, ideally Leon and Helen would like to spend more time actually farming, but as they have proved whilst looking at old figures for the purpose of this profile, the costs involved in producing and selling wool continue to rise, whilst prices obtained are very low in comparison. Please see tables to the right as an illustration of this:



Rincon Ridge 1988/89

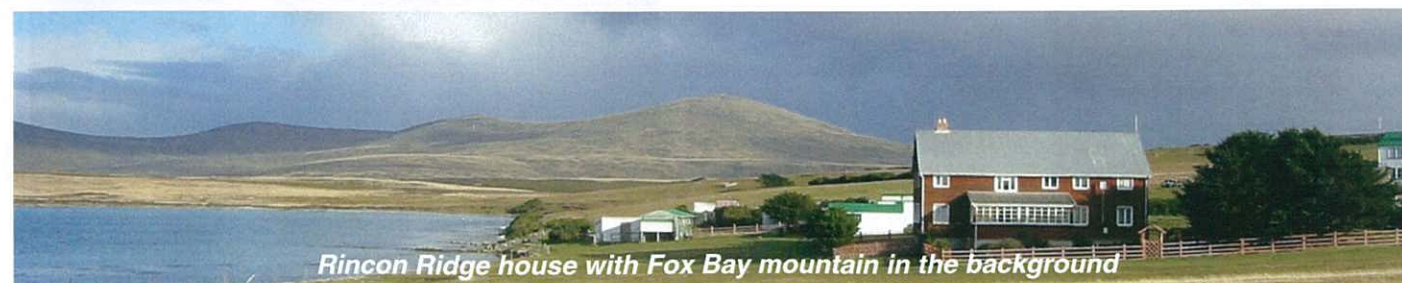
Sheep	Micron	Nett Fleece Value
Hoggets	25.7	£3.95
Shearlings	29.5	£3.34
A/AA	29.2	£3.34
B/BB	31.0	£2.95
C/CC	33.0	£2.94

Rincon Ridge 2007/2008

Sheep	Micron	Nett Fleece Value
Hoggets	21.7	£4.45
Shearlings	24.3	£3.57
A/AA	24.4	£3.41
B/BB	26.0	£2.75
C/CC	28.1	£2.00

When you consider that, for example in 1989 diesel cost 22p per litre, petrol was 25p per litre, casual labour cost £3.20 per hour and shearing and freights costs were considerably less than they are now, it's quite hard to imagine where farms will be in another five or ten years time.

Despite this they are happy to continue to live and work out in camp and hope that they will still be here for many years to come.



Rincon Ridge house with Fox Bay mountain in the background

WIDE LOAD, LONG DRIVE

by Tex Alazia, Port Edgar Farm

Mike and Donna Evans decided that as Spring Point was recognised good lambing ground, it would make sense to run their South Harbour ewes at Spring Point and run their Spring Point wethers at South Harbour.

This would mean trucking a lot of sheep in opposite directions, not a cheap operation and a bit time consuming with over 1500 animals to move. The other option would be to drive them, but its quite a long way with three other farms to cross in between and Mike and Donna have no dogs.

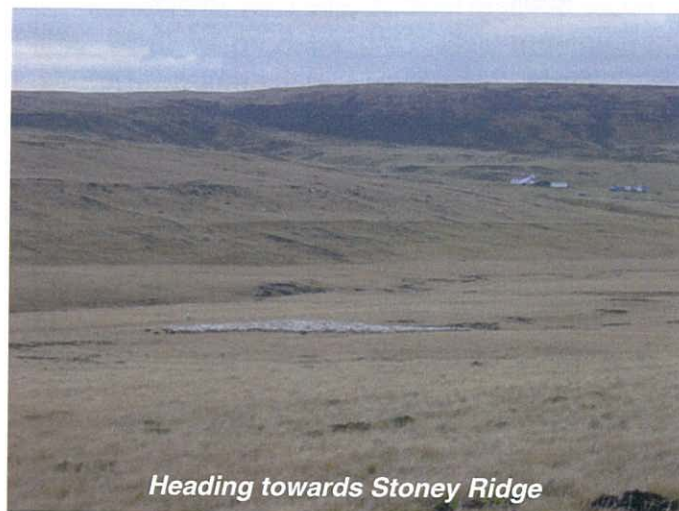
But I jumped at the chance to do it as with all the fencing that has been done in recent years, plus roads and trucks such long drives

are diminishing.

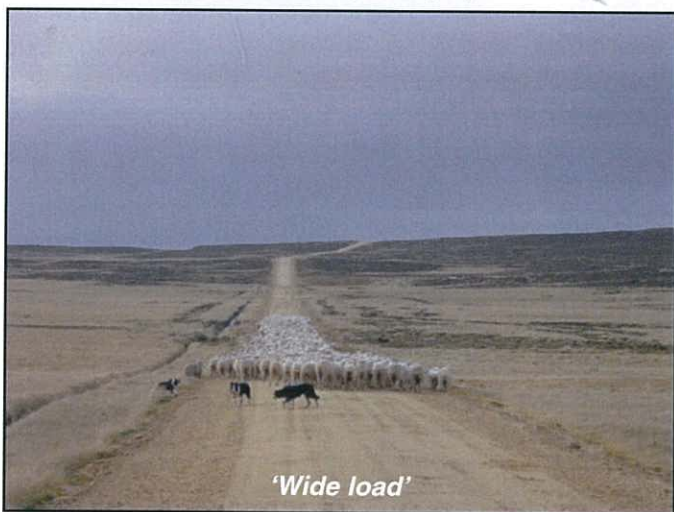
So in March, I drove the wethers down over two days and just recently the ewes up. I really enjoyed it and got some young dogs working better. Although as in the photo, once the sheep realised that it was far easier to walk on the road, it was hard to get them off. This was the case, especially with the ewes, when the camp was a lot wetter and I wanted to get them off bad stretches on the road, so as not to tear it up any more.

By the way, it was time well spent as Mike allowed us to graze our ewes on some land he recently purchased but at present not using. It was a boost for us as the land has not been grazed for nine years!

Finally thanks to Justin and James and Jennifer for crossing their land and for the over night stay in Stoney Ridge paddock.



Heading towards Stoney Ridge



'Wide load'

Caption Competition:
The Horse Whisperer



Just what is Jennifer whispering to her horse?

Email sferguson@doa.gov.fk or fax 27352 with your suggestions



Picture - M Marsh

TO NEUTER OR NOT TO NEUTER THAT IS THE QUESTION

By Susan Campbell

It's not uncommon for farmers to reject neutering of their working dogs on the basis that they will get fat and won't work, or because of some other belief that it may change their character or ability to work.

I am here to assure you that this is not the case. If dogs do put on a little more weight then don't feed them quite as much. It is in your control.

I have known many working dogs that have been neutered and they have remained as good a working dog after they were neutered as before.

There are other obvious benefits to neutering your working dogs. You will not have to worry about bitches being out of action when on heat or pregnant or dogs straying. Nor will you need to find homes for unwanted puppies, let alone carry out the barbaric practice of killing them as they are born. Having puppies is not without its risks too and many bitches do have difficulty whelping and require caesareans.

There are drugs that can be given to bitches within a few days of unwanted matings to prevent the pregnancy and while this is not ideal, as they can at times result in uterine infections or not work properly, it is far preferable to having to dispose of new born puppies.

Other benefits to neutering are that it extends the average life of a dog, it eliminates the chance of testicular cancer and greatly reduces the chance of prostate cancer or other prostate problems in dogs. It reduces the chances of mammary gland tumours (almost eliminating the chance of mammary cancer if bitches are spayed before their first or second season) or life threatening uterine infections in bitches.

It is therefore my belief that unless you have a remarkably good dog that you know to be free of hereditary problems and a proven worker that you particularly want to keep for breeding, all other dogs (working or not working), should be neutered.

To chat about getting your dogs/bitches neutered give the Vet Service a call on 27355.



Dates for the Diary



- 6th - 10th July **Farmers Week**
Most sessions will be held in the Town Hall and a full programme can be found on page 14.
- 11th July **Governors Cup Darts Tournament**
- 12th August **Dog Dosing (Droncít)**
Please remember to contact the veterinary service on telephone no 27366, fax no 27352 or email imports@doa.gov.fk and advise when your dogs have been dosed.
- 15th August **Dog Trials at North Arm**
- 1st September **Start of the 2009/2010 Trout fishing season**

SEED GERMINATION

by Gordon Lennie

Checking the viability of your seed stored on the farm is an important issue to consider. If you have to store your seed for more than a year then you need to be aware that a combination of high temperature plus humidity can lead to a rapid decline in seed germinability and vigour.

Farmers would therefore be advised to carry out a warm germination test on any stored seed over a year old that they intend planting in the spring. This will give a reasonable idea of field emergence under favorable conditions.

The Department of Agriculture is able to carry out a warm (Standard Germination) test for farmers if requested.

The simplest way to carry out the test in the lab is to count out 400 seeds (from a sample taken from a bag) and place these in a damp folded paper towel. A small garden spray bottle is used to wet the towel first. The towel plus the seeds are put in a plastic zip-top bag and sealed.

The bag is labeled with the date and seed variety and placed in a warm place (20-25 °C). The seeds are then checked daily for germination and the count noted down. Any germinated seed are removed from the paper towel. After about 21 days a total count is made of the germinated seed and the % germination calculated.

Good quality seed should have a germination rate of between 90-100%. If the result is 60-70% then you will need to sow the seed at higher rate to allow for the lower germination test result.

For example for seed normally sown at 10Kg /ha (with test result 60% germination) the adjusted seed rate is $100/60 \times 10\text{Kg} /\text{ha} = 16.7 \text{ Kg}/\text{ha}$.

If farmers are interested in doing their own germination tests on the farm then please feel free to contact the DOA laboratory for a method sheet.

For Sale

About 90 unjoined ewes in good order. 3-7 years old. Contact Andrez Short at Swan Inlet.

Monday 6th July

Town Hall (unless specified otherwise)

9am - 12pm **Rural Expo (organised by the RBA)**
Acting Governor Mr Martinez will open the Rural Expo and there will also be a breakfast supplied. The Department of Agriculture will be hosting a stand at the Expo.

RBA Committee Meeting
In the Town Hall Refreshment Room

1pm **Shipping Session (RBA members only)**
Question & Answer Session: to include SAAS, FIC and Workboat Services

RBA Annual General Meeting

5pm **Falkland Islands Wool Company Annual General Meeting**

7.30pm **RBA Party**
To be held in Stanley Arms and children are welcome



Tuesday 7th July

Town Hall (unless specified otherwise)

9am **Fire Training & Presentation**
At the FIGAS Air Terminal

Smoko

11am **Falkland Islands Development Corporation (FIDC)**

12pm Lunch provided by FIDC

1pm **Falkland Islands Meat Company (FIMCo)**
Annual Review

3pm - 4.30pm **FIDC Aquaculture Visit**

7pm **FIODA - Variety Show**

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Wednesday 8th July

Town Hall (unless specified otherwise)

9am	Introduction	Phyl Rendell
9.15am	Discussion on key aspects of growing and grazing	Andrew Pollard & Tony Mills
10.45am	<i>Smoko</i>	
11am	Discussion on sheep health and welfare	Steve Pointing & Zoë Luxton
	<i>End of DoA sessions for the day</i>	
12pm	Lunch provided by FIMCO	
1pm	FIMCO <i>2010 Export Season</i>	
2.30pm	Tourism Presentation	
6pm - 7.30pm	Governors' Reception <i>Government House</i>	Invite Only
<i>followed by</i>	Falklands Conservation Reception	Invite Only



Thursday 9th July

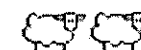
Town Hall (unless specified otherwise)

9am	Tourism Presentation	
10.30am	<i>Smoko</i>	
11am	Discussion on weaner management for sheep and cattle	Mac McArthur, Ian Campbell & Susan Campbell
12pm	<i>Lunch provided by the DoA</i>	
1pm	Discussing the ideal sheep for the Falkland Islands	Ian Campbell & Tony Mills
2.30pm	<i>Smoko</i>	
2.45pm	Live animal carcass assessment and future supply chains	Mac McArthur, Hew Grierson & Paul Phillips
4pm	Discussion on burning issues	Andrew Pollard

Thursday 9th July - *continued*

Town Hall (unless specified otherwise)

10.30am	Organics Update	Ian Campbell
4.15pm	Wrap up session	Mac McArthur
4.45pm - 5pm	<i>End of DoA sessions for the week</i>	
7pm	Hillside Meal	Invite Only



Friday 10th July

Town Hall (unless specified otherwise)

9am	Councillors Question & Answer Session <i>RBA Members only</i>	
11am	FIMCO <i>Local Market and wash-up. Questions and Answers Session</i>	
12pm	<i>Lunch provided by the RBA</i>	
1pm	FIDC	
2.30pm	FIDC (FIPASS) <i>Visit to the machine corer and double dumping machine</i>	
Evening	Camp Education Dance	



PLEASE NOTE:

- The Department of Agriculture has organised or will be involved in all the shaded sections of the programme. Please contact us on telephone 27355 or email sferguson@doa.gov.fk for more information.
- Everyone is welcome to attend the Department of Agriculture sessions during Farmers' Week. This is the International Year of Natural Fibres, so along with the normal regular sessions, we will be promoting "Wild and Woolly" in the Falkland Islands and hope to have a variety of products and information on display
- Following the Rural Expo, the Department of Agriculture stand will be on display in the foyer upstairs in the Town Hall.
- For more information on all other sessions, please contact SeAled PR on telephone 22432 or email rba@horizon.co.fk
- On Saturday 11th July, the Governor's Cup Darts Tournament will be held in the Town Hall. Entry is £3, to be paid when sign your name up on the list in the Chandlery.

FARM MANAGEMENT HANDBOOK INDEX

By Siân Ferguson

To ensure that your Farm Management Handbook is up-to-date, we regularly send out loose sheets with your Wool Press to be put in your folders (these always have four hole-punches).

To enable you to make sure your FMH has all the recent updates, I have compiled a list of what you should have and the date of a recent change so you can make sure everything is in order.

If you do not have a FMH and would like one, or have any questions, please get in touch with me.

	Section/Sheet	Recently Updated On	Section/Sheet	Recently Updated On
General	Area		Clip Preparation Guide	April 2006
	Body Condition Scoring		Core Sampling	April 2009
	Camp Medicine Chest Contents		Coring SOP's	April 2009
	Contact Information	January 2009	Horse Colours	
	Fees	September 2008	Organics	September 2008
	Fire Guidelines	September 2008	Quality Falkland Wool	January 2009
	Labour Scheme Conditions	June 2007	QFW Checklist	January 2009
	Length		QFW Shed Inspection Report	January 2009
	Public Holidays 2006-2009	January 2007	Scanning Guidelines	
	Rainfall		Wool Mid-side Sampling	October 2008
	Staff Chart	January 2009	Agronomy Tests	
	Training Schemes		Artificial Breeding Programme and PIP Funding	November 2007
	Video's	December 2008	Fertiliser Rates	
	Volume and Temperature		Pasture Improvement Programme	November 2007
	Weight		PIP Funds at Ram Sale	November 2007
Finance	Depreciation Allowances	May 2006	PIP Sheep Genetics Application	November 2007
	Extra Statutory Concessions		Proposed PIP Priorities	November 2007
	Farmers Tax Guide		Purchasing Live Rams with PIP Funds	November 2007
	General Tax Guide		Soil Test Application	November 2007
	Guide - POAT		Soil Testing & Site Selection for PIP Funding	November 2007
	Insurance Issues & Perils	December 2008	Trees	
	POAT Examples for Self-Help		Advice for the use of Estrumate	January 2009
	Self-Employment		Animal Movement Certificates	September 2008
	Annex A Sites		Beef Kill Report Form	September 2008
	Annex B Sites		Bovine Tuberculosis	September 2008
Legal & Codes of Practice	Burning Permit	November 2006	Caseous Lymphadenitis	June 2007
	Designated Sites Legislation		Cattle Identification	September 2008
	Grass Fires Ordinance 2002		Consultation Hours	September 2008
	Licences		Dog Dosing Dates	December 2008
	Plant Import Guidelines	January 2009	Dog Neutering	
	Notifiable Diseases		Gestation, Oestrus and Temperature Tables	
	Planning Permission		Import of Live Animals	September 2008
	Species Legislation		Is Your Dog a Health Hazard?	
	Transport of Animals		Killing Facilities on Farms	September 2008
	Welfare of Cattle		Lambing Care	September 2008
	Welfare of Dogs		Ram Exam Workshop Handout	May 2007
	Welfare of Horses		Veterinary Fees	September 2008
	Welfare of Pigs		Veterinary Diagnostics	September 2008
	Welfare of Sheep		Worming Horses	

Recipe Spot

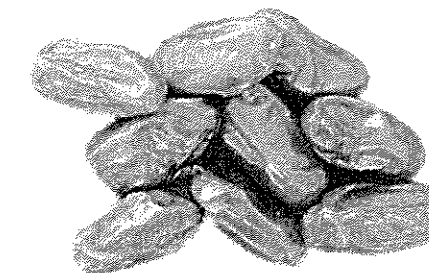
Taste tested and provided By Zoë Luxton, Stanley

Sticky toffee and date pudding

Ingredients:

- 480g dates - stoned and diced
- 50g unsalted butter - softened
- 100g caster sugar
- 75g dark brown sugar
- 2 eggs
- 175g self raising flour

- Toffee sauce
- 300ml double cream
- 50g brown sugar
- 2 teaspoons syrup



Heat oven to 180°C/gas mark 4 and butter four dishes.

Simmer dates in 300ml water for five minutes and cool. Cream butter and sugar, add eggs, mix in dates, date liquid and flour.

Put into dishes and bake for 25-30 minutes. Use one large dish and just bake until cooked (skewer comes out clean).

Sauce - cream sugar and syrup in a pan and heat gently until the syrup is dissolved. Then boil for 2-3 minutes, stirring until smooth. You can use treacle instead of syrup.

If you enjoy recipes other people have contributed to the Wool Press, why not send in your own favourites to share?

Cow dives in pool for a dip

Source: Ananova.com

A Buckinghamshire couple rushed to their swimming pool after hearing a loud splash - only to find that a cow had burst into their garden and taken the plunge.

The animal had broken through a hedge at Mark and Zoe Ryder's home in the village of Whaddon and dived in for a swim, tearing right through the pool cover.

Mr Ryder and two friends tried to coax her out of the water by lassoing a rope over her head and steering her towards the steps, reports the Daily Telegraph.

But when that failed, they called the fire brigade and the RSPCA - but as soon as rescuers arrived, the cow calmly climbed out of the pool of its own accord.

Mr Ryder, who runs a travel agency, was taking a shower when he heard the commotion and ran outside.

He said: "There she was, a cow staring at me from the shallow end. She had ripped through the cover and was standing waist-deep in the water.

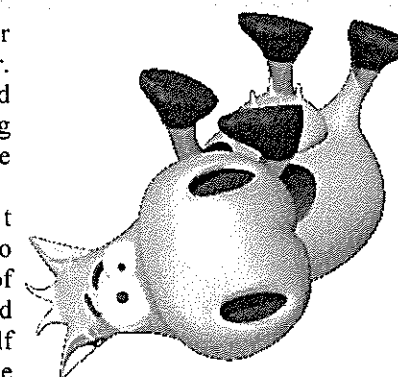
"She started swimming down the pool to the deep

end and went under the remaining cover. We were worried about her drowning so we ripped the cover off.

"She got spooked and tried to jump clean out of the pool but ended up half out and half in, where she stopped and fell asleep, as she was so exhausted."

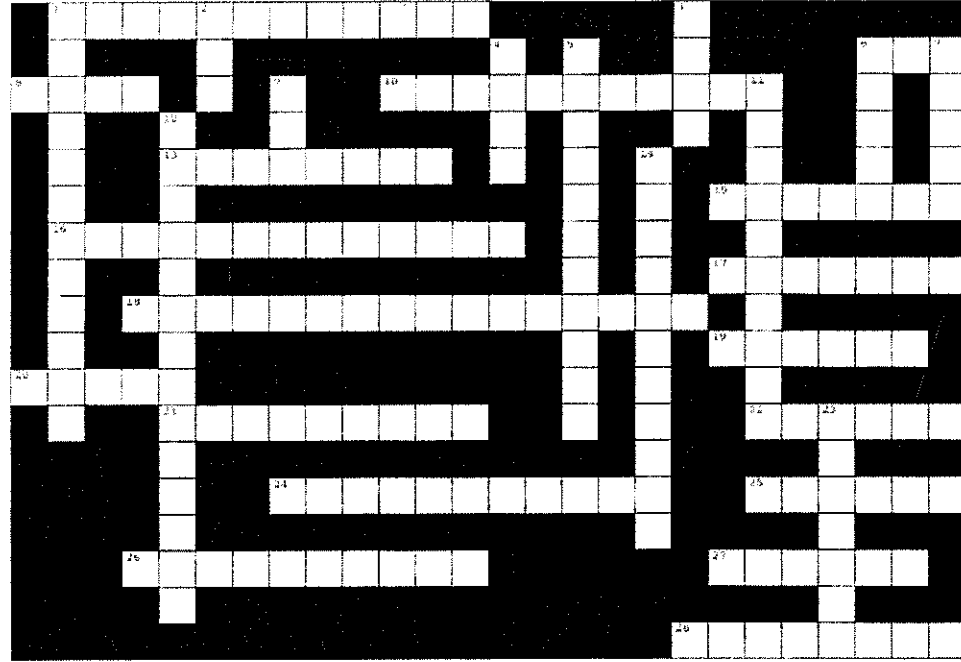
David Braybrooke, an RSPCA inspector, checked the cow over but decided that she had not done herself any serious harm.

He added: "The RSPCA gets involved with all sorts of unusual calls for help, but this must be one of the oddest we've ever had to deal with."



PUZZLE PAGE

Crossword



- Across:**
- 1. To impregnate females without sexual intercourse see 10A (12,11)
 - 6. Large, rounded milk vessel of earthenware
 - 8. To increase in size by a natural process
 - 10. See 1A (12,11)
 - 13. Type of baleen whale (3,5)
 - 15. End of season farmers get together see 4D
 - 16. 2009 abattoir OVS (5,8)
 - 17. A machine that inserts metal into paper
 - 18. 2009 winners of the Barclays Football League (10,6)
 - 19. A Murrell Farm ridge and a ship named

- 20. Type of crackers
- 21. A dog bred in the UK for hunting, shortest life span
- 22. Grows in clumps and along coasts see 7D (6,5)
- 24. Last months dingbat answer, a pudding (6,5)
- 25. See 6D (5,6)
- 26. 2009 abattoir MHI (5,5)
- 27. "I'm sorry the position of annoying talking animal has already been filled" Shrek 2 quote by which animated character?
- 28. A mobile phone

- Down:**
- 1. Provides a service for farmers see 11D (12,10)
 - 2. Soft, fine, short hair
 - 3. Domestic feline
 - 4. See 15A (7,4)
 - 5. River that empties into the Gulf of Mexico
 - 6. Naked Chef see 25A (5,6)
 - 7. See 22A (6,5)
 - 9. Not high or elevated
 - 11. See 1D (12,10)
 - 12. First ocean-going ship with iron hulls and screw propeller, launched in 1843 (2,5,7)
 - 14. To prevent and control disease and pests
 - 23. A nutty and caramel chocolate

Sudoku

Each Sudoku has a unique solution that can be reached logically without guessing. Enter digits from 1 to 9 into the blank spaces. Every row must contain one of each digit. So must every column, as must every 3x3 square.

1	4		9		3		7	2
9	2			4			3	8
2			5		8			4
	7						1	
6			7		1			3
4	9			5			8	1
5	6		3		9		4	7

Brainteaser

If York is 9 miles away, London is 14 miles and Manchester is 23 miles away. How far away is Leeds?

DingBat Brain Games

Flex your brain, free your mind and think laterally

S
T
O
N
E

L
A
N
D
S

Hint: Describing out loud what you see may give you the clue you need!!

Last Month's Solutions

6	8	4	1	2	9	3	7	5
9	7	5	3	8	4	6	1	2
2	3	1	6	5	7	8	9	4
4	9	2	5	6	3	7	8	1
7	1	3	9	4	8	2	5	6
8	5	6	2	7	1	4	3	9
5	4	8	7	1	2	9	6	3
1	2	9	8	3	6	5	4	7
3	6	7	4	9	5	1	2	8

T42

Tea for two

T T T
T T T
T T T

Teepee

If you would like to see a particular type of puzzle in the Wool Press, then please let us know!

Brainteaser
A map

THE WOOL PRESS

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Fax +500 27352

sferguson@doa.gov.fk

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Wool Price Trend Over Time - page 13

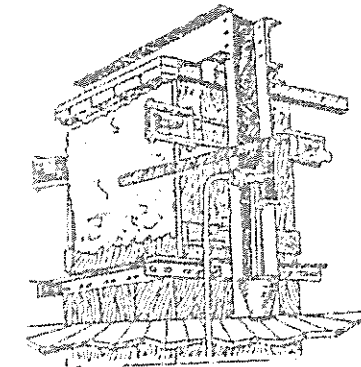
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Plus all the usual features and more!!



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EDITORIAL

The high attendance at the Department's presentations during Farmers' Week this year is really appreciated. Thank you to all who attended and took part in the lively discussions. Particular thanks are extended to Hew Grierson and Paul Phillips for personally presenting their farm production and financial figures at one of the workshops. Staff would welcome feedback on the subjects covered and on what additional topics you would like to focus on during the year. Please contact Siân if you would like a CD of the DoA presentations for reference.

Two of the topics addressed in Farmers' Week are included in this publication. Firstly, Mac McArthur and Ian Campbell launched plans for future beef production in an aptly named project: **Beef 20/20**. We are all aware that there must be markets before increased beef production can be economic but the ground work needs to be put in place in order to produce consistently high quality beef. With the National Beef Herd located back at Saladero, Mac and Ian are seeking comments on their proposals.

Secondly, Steve Pointing has written the first of two articles on animal welfare. His account is food for thought in a changing world. The Falklands has to take account of these matters as we strive to increase and develop animal products for export.

Ian has also written a succinct piece about selling wool. This is a subject that can never be overdone when producers need to get the very best price for their clip. Among a number of critical points, Ian reminds us to watch out as to whether prices are quoted as gross or nett and to remember that QFW status could become more significant when selling your wool.

Susan Campbell addresses the use of drenches on farms which follows on from the excellent workshops she ran on both East and West Falkland earlier this year. Do take up the offer of free faecal egg counts provided by the Department at present to help you assess the parasite burden in your stock.

Thank you to Tyrone Whitney and Sara Hewitt for sharing Home Farm with readers. It is very encouraging to read about young people owning and running farms. Yes, you are young, Tyrone! There is a future in farming where products meet market specifications as was highlighted by the farmers who shared their farm financials in Farmers' Week.

Embryologist Michylla Seal writes about another successful sheep ET/AI programme this winter with her assistant Hayley Willmott and coordinator from the Department, Tony Mills. Thank you Michylla for your article and I hope you can return in summer one year!

I am writing this as more snow falls and the Department on Airport Road is engulfed in snow drifts. Sarah and Zoe had to dig their way in this morning! More worrying is how all the readers of this publication will fare with sheep losses which will not be known until it thaws. My thoughts are with you as you get out into the camps and assess the situation.

Phyl Rendell
Director of Minerals & Agriculture

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SELLING WOOL - HOW DO YOU KNOW WHAT PRICE TO ACCEPT?

By Ian Campbell

You carry out the best clip preparation you can, choose a selling system then suddenly you are offered a price and very little time to accept or reject it. What do you do?

Quite a few people ring DoA for advice which we are happy to give but we can only realistically work through two issues with you.

*Do you think the current market is going to lift soon?
Is it a fair price for the current market?*

Let's firstly look at movements in the price of wool on the export market. Last year the average AWEX MPG for 23 μ wool was 379p/kg, but varied from 264p/kg to 438p/kg. This type of fluctuation is not unusual - it occurs most years but can only be seen with the benefit of hindsight. In reality the time of wool selling is often based on the time of shearing, and how soon you can sell once it is all baled up. This in turn is usually driven by cash flow requirements. Holding on until the market lifts is one strategy to earn more, (currently, warehousing in the Falkland Islands is not a cost to the farmer). Opportunity costs (eg interest paid on your farm borrowings) need to be factored in with this strategy, so price improvements need to become substantially greater the longer they take to be realised.

Crystal ball gazing is hard though, and nobody will know whether markets next week or next month will be up or down. We can't help you with this. All you can look at are indications of supply and demand for wool in the future, and understand effects of exchange rate - another unknown variable - on top of the wool market. A few pence change in exchange rates will make a big difference to AWEX. Obviously we all want to sell at the peak; all you know though is that if a market is going up - it will then come down; and if you hold off too long you will get less. Adding further insults you will then have to wait longer for the reduced wool cheque.

Another method of price risk management is to sell some lines and hang on to others. You won't ever sell everything on the best day, but nor will it all be sold on the worst day.

So let's now look at the price on any given day. Is it a fair one? Or should the buyer be asked to "sharpen their pencils". If you ask and they think it is a good price they might just walk away from the deal - particularly in a bearish market. If you don't ask you won't get it.

We report on AWEX (The Australian Wool Exchange) because worldwide they are the biggest wool exporters and so have the most realistic current market report on wool prices. We convert it to pounds which may compound actual wool prices as the relativity between currencies has an impact. As most wool sellers know, AWEX does have its limitations, and due to freight costs in particular AWEX values are rarely realised here.

AWEX report individual micron prices (MPGs) and also an Eastern Market Indicator (EMI) - a single figure based upon a weighted average of all wools. With individual lines of wool, MPGs are discounted for poor yield, colour, tenderness etc. and premiums are paid for good colour and style, yield, low vegetable matter and strength etc. Then on top of that are more fluctuations because each line of wool is a unique transaction.

But I jump the gun. Firstly when we compare one price to another we need to make sure we are comparing like to like.

AWEX and most wool prices are quoted in Clean Fleece Weight (CFW) but some prices are in Greasy Fleece Weight (GFW). Use the % yield to convert between them. AWEX is a gross price. Make sure you know what price you are being quoted. Is it a gross price, or nett Stanley or some other compilation of gross price less some costs? You need to know what costs have been taken out if any - and what more will be taken out before you get the equivalent of nett Stanley - or the amount to be deposited in your bank.

nett Stanley is calculated as:

Gross Price on a CFW basis.
Less Brokers commission and testing fees
Less Freight costs to delivery point

A lot of costs have come out of a nett Stanley price, so if you can get within 50p of AWEX it is considered a good price. Obviously if the costs have not been taken out you need to get a lot closer.

As an indication of selling costs if you use a broker they are usually around 3 to 4% or 6-20p/kg. Wool testing will be around 5-10p/kg depending on lot size.

Freight costs vary depending on where the wool goes and how much is stuffed into containers. Partially full containers will boost the cost per unit. Assuming full containers, freight to Europe is around 24p/kg greasy (remember to convert) and South America is around 8p/kg. Many countries have weight restrictions and you need to know these, but generally a 40 ft container will be about 90 bales.

Most wools sold through AWEX have a grab sample on display and additional measurements on offer. Whilst this is rare for Falkland Island wools it is now possible (certainly to have the results) but most buyers when questioned do not think it would improve prices much - as the clip fines up this may change.

Sometimes in a bearish market there are hardly even any offers and this is quite depressing. All we can suggest is do as much as you can with good clip preparation, including QFW, because market access, when there is little interest in the market, can sometimes become an issue. At least then there is a decision to make if you have an offer.



SELECTING DRENCHES AND AVOIDING DRENCH RESISTANCE

By Susan Campbell

Drench resistance is a growing concern world wide, and the more you use drenches the greater the concern. For this reason the decision as to which drench to select should not be made on the basis of cost alone.

There are now basically four drench groups; three that have been around for a while and one very new one just released in New Zealand.

The very best way to prevent drench resistance is actually to combine all the drench groups together and give them as a single dose. This however is far too expensive and not very practical so the next best way to prevent onset of drench resistance is to rotate around these groups on an annual basis, changing drench groups at the first summer drench which may actually be in late

spring.

The drench groups are:

1. White drenches which are the benzimidazoles. These days they are not necessarily white but opaque, especially if they have minerals added. They include drenches such as Panacur (available at Falkland Farmers) and Fencare (available as the mineralised form from Southern Imports)
2. The clear drenches or levamisole based drenches. Although clear they are now not the only clear drenches and may have a colour to them also. They include drenches such as Levacur (available from Falkland Farmers) and Levitape (available in the mineralised form from Southern Imports).
3. The next group is the Mectins or Macrocyclic Lactones. They include Ivomectin (available as a cattle drench from Falkland Farmers) and Firstmectin and Virbamec Se which is abamectin (available from Southern Imports)
4. The most recent drench which is a new group is Zolvix with the active ingredient of monepantel. This is very expensive and at this stage there is little indication that there is any need for its use in the Falkland Islands.

I would consider it wise to rotate around the first three of these drench groups on an annual basis and check them a couple of times during the year to ensure that you are getting a good response to drenching. This can be done by collecting ten individual faecal samples 10 to 14 days post drenching and sending them into us for a FEC. If the result is not 0 epg then it may well be worth doing a full drench resistance trial in which we can ascertain the effectiveness of all the drench groups on your farm. This will then give you the information that you need to know in order to decide on an effective drenching program which might for instance include a combination drench of a white plus a clear drench such as Arrest.

With the use of white drenches it is wise to have sheep off pasture for 24 hours pre drenching and 6 hours post drenching. This helps to maximise the time that the drench is present in the sheep's stomachs and considerably improves the effectiveness of the drench. This is not recommended with the clear drench group as spelling animals can lead to toxic effects from the drench.

With all drenches it is very important to ensure that the drench is delivered carefully to the back of the tongue so actual drenching technique plays a very important role. Malpositioning of the drench gun can result in the drench going down either the trachea or through what is known as the oesophageal groove; the first obviously resulting in respiratory problems and the second causing the drench to go straight to the abomasum rather than through all the stomachs which allows for longer and better absorption and thus a more effective drench.

In addition to the above drench groups, but not currently available in the Falkland Islands, are drench capsules. These come as either a white drench form or a mectin drench form and can often be used even when the drenches have resistance problems on your farm if used with an effective drench to start with. These slow release capsules will then give 100days worm free even if sheep are placed back onto infected pasture and it is in this circumstance that their use may be necessary. The down side is that they are very expensive and also that they possibly enhance the development of drench resistance. They also require immense care when they are given to the sheep as if not delivered carefully into the oesophagus they can penetrate the back of the oesophagus and cause death.

There is also a long acting Cydectin drench also not yet available in the Falklands but this gives

approximately 80 days protection against Ostertagia which is the main parasite in the Falkland Islands. We will soon run some trials to see how effective this is on one farm here.

Many of the drenches currently sold here have various additives including Praziquantel which is added to abamectin in Firstmectin Se and is also in Levitape. This is a fairly expensive additive and is added to remove tape worms. I personally feel this is an unnecessary additive and if it is possible to buy the basic ingredient without the Praziquantel cheaper than that is what I would get. This is because although tape worms might look spectacular as they come out in the faeces they are not causing an economic problem.

The other additives that are commonly found are the mineral additives. For a number of reasons drenches are not the ideal way to give minerals as giving minerals should really be based on the known status of deficiency which has been diagnosed from blood testing a representative sample of sheep. It is then best to treat the animals with the appropriate mineral or minerals given in a long acting formula such as Cobalt bullets etc which last for two years whereas the mineral supplements in drenches are only effective for possibly 6 weeks and the need to drench may only be twice a year or not at all thus providing inadequate mineral supplement. However if you are not prepared to go to the trouble of finding out what mineral deficiencies exist on your property and knowing that mineral deficiency is possibly a real issue here in the Falklands then a little supplement is possibly better than nothing. However it does come with a warning that too much can be toxic.



THE BEEF 20/20 PROJECT

By Ian Campbell

Increasing beef production from farms has many benefits. Extra income, income diversification, grazing management efficiency, import substitution, worm parasite control - need I go on?

To prepare a steer for processing takes a good three years, and a lot of resources. It is essential if we are doing that that there is a fair price guaranteed at the end. The Beef 20/20 project is all about having a clear vision into the future about where the Falkland Island beef industry is heading.

Currently there are nearly 6,000 cattle in the Falkland Islands and less than 10% of these are processed for beef annually. The current beef herd structure and management does not support sufficient throughput to provide the quantity and quality required for the domestic market, let alone venturing into exports.

There are two major supply issues, fluctuating availability throughout the year and the low volumes available each year. In the recent past the balance has tipped the other way though - so a coordinated industry approach is essential.

The Beef 20/20 project is seen as a joint effort of all interested parties, working towards a common goal or "All singing off the same hymn sheet". It has seven sub projects - each one a vital link in the chain which is about increasing beef production in a controlled and profitable manner for all.

1. Finishing systems and Continuity of Supply

This sub project will look at cattle growth rates on different feed resources over time. The goal is to develop and monitor finishing systems for varying times of the year so that cattle can

predictably reach the required optimum specifications at the time FIMCo are ready to purchase them.

2. Live Animal Assessment

To be able to reliably determine the carcass qualities of live animals before slaughter so that only appropriate animals are targeted for finishing, and ultimately only appropriate animals are used for processing and genetic selection. Cattle will be weighed, condition scored and measured during all stages of growth and prior to slaughter, and an ultrasound probe will be used to accurately record fat and muscle growth during development.

3. Genetic Improvement

We think the likely genetic goals will be for quiet, quick maturing, polled animals that will fit into the specifications of 160-280 kg carcass weight and 5-12 mm fat at 18-36 months of age.

The National Beef Herd is a key component of this project as are other genetically superior herds in private ownership. The sub project will encourage and assist in performance recording and the dissemination of superior genetics through the sale or lease of breeding bulls.

4. Cattle herd structure, management and health

This project is about defining state of the art beef cattle herd management systems for the Falkland Islands. Defining ideal mating ages and weights, weaning times, herd structures and herd health recommendations. Ultimately this sub project has three main goals.

- Breeding cow numbers will need to rise
- Reproductive efficiency will need to rise and
- The proportion of steers that reach market specifications will need to rise

5. Cattle Infrastructure Development

Unfortunately there is a need for some capital expenditure and it needs to be done wisely to develop an infrastructure of yards, loading ramps, scales etc which will facilitate efficient cattle handling, transport and management. Without these many of the other projects will be unattainable.

6. Live Animal Marketing Issues

To develop firm markets for cattle so that growers can be assured of selling appropriately prepared livestock when they are ready, and FIMCo can access the appropriate quality stock when they need them. It is essential this demand based sub project is integrated with the supply oriented sub projects.

7. Compliance Issues

To ensure EU and Organic compliance issues are adequately met. The red tape sub project that hopefully just happens with few problems - but will become essential if we are to grow the beef industry beyond the domestic market.

Summary

The beef industry can become a far greater contributor to the agricultural economy. For it to happen will take commitment and communication and careful planning which is what the Beef 20/20 project is all about.

We would very much like to receive feedback from you - at this stage it is an idea and I am sure there could be improvements or discussions made so please email them in to any of the DoA staff.

The annual Farmers' Week (organised each year by the Rural Business Association), took place this year from Monday 6th to Friday 10th July.

The Department of Agriculture set up a stand at the Rural Expo on Monday morning, displaying information on a variety of our projects. This year is the International Year of Natural Fibres (organised by the Food and Agriculture Organisation of the United Nations), so the theme throughout the week was "Wild and Woolly". Alongside information of the DoA's projects, we had on display a number of woollen items from around the Falkland Islands in support of the International Year of Natural Fibres. Members of the Guild of Spinners of Weavers were also present, demonstrating the spinning and weaving process.

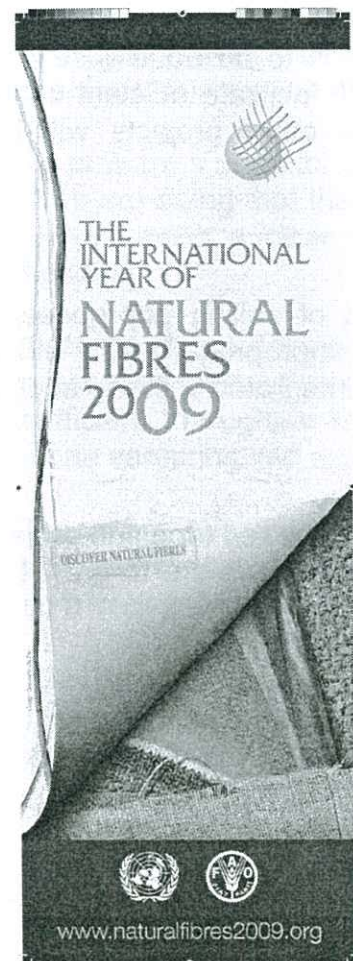
On the Wednesday and Thursday, the DoA held a number of presentations and

discussions for farmers and interested members of the general public. These included sheep welfare and disease issues, grazing and growing crops and pastures in the Falkland Islands, an update on the organics scheme, the beef industry in the Falkland Islands, grass/pasture burning, the ideal sheep for the Falkland Islands, weaning and new season lamb. Two farmers also gave presentations on their livestock production and farm financial benchmarking.

You can find a summary of the DoA presentations in this issue of the Wool Press, with the remaining ones in the September issue.

All of our presentations are available to view on-line at www.agriculture.gov.fk or you can contact us on telephone 27355 or email sferguson@doa.gov.fk to obtain a free cd containing all our presentations and copies of the posters displayed at the Rural Expo.

The International Year of Natural Fibres Display...



THE INTERNATIONAL YEAR OF NATURAL FIBRES 2009

Why natural?

Also known as natural fibres, these fibres are made from natural sources such as sheep, goats, alpacas, camels, and cashmere. They are biodegradable, renewable, and have a low carbon footprint. Natural fibres are also known for their softness, warmth, and durability.

What are natural fibres important?

Natural fibres are important because they are a sustainable and renewable resource. They are also known for their softness, warmth, and durability. Natural fibres are also known for their biodegradability and low carbon footprint.

What are the benefits of natural fibres?

Natural fibres are known for their softness, warmth, and durability. They are also known for their biodegradability and low carbon footprint. Natural fibres are also known for their renewable and sustainable nature.

www.naturalfibres2009.org

THE INTERNATIONAL YEAR OF NATURAL FIBRES 2009

Wool

Wool is a natural fibre that is made from the hair of sheep. It is known for its softness, warmth, and durability. Wool is also known for its biodegradability and low carbon footprint. Wool is a renewable and sustainable resource.

What are the benefits of wool?

Wool is known for its softness, warmth, and durability. It is also known for its biodegradability and low carbon footprint. Wool is a renewable and sustainable resource.

www.naturalfibres2009.org

ANIMAL FIBRES

Alpaca Alpaca wool is a natural fibre that is made from the hair of alpacas. It is known for its softness, warmth, and durability. Alpaca wool is also known for its biodegradability and low carbon footprint.	Mohair Mohair is a natural fibre that is made from the hair of goats. It is known for its softness, warmth, and durability. Mohair is also known for its biodegradability and low carbon footprint.
Angora Angora wool is a natural fibre that is made from the hair of rabbits. It is known for its softness, warmth, and durability. Angora wool is also known for its biodegradability and low carbon footprint.	Silk Silk is a natural fibre that is made from the cocoon of silkworms. It is known for its softness, warmth, and durability. Silk is also known for its biodegradability and low carbon footprint.
Camel Camel hair is a natural fibre that is made from the hair of camels. It is known for its softness, warmth, and durability. Camel hair is also known for its biodegradability and low carbon footprint.	Wool Wool is a natural fibre that is made from the hair of sheep. It is known for its softness, warmth, and durability. Wool is also known for its biodegradability and low carbon footprint.
Cashmere Cashmere is a natural fibre that is made from the hair of goats. It is known for its softness, warmth, and durability. Cashmere is also known for its biodegradability and low carbon footprint.	

www.naturalfibres2009.org

PLANT FIBRES

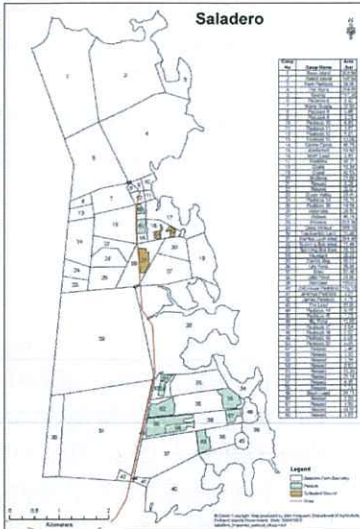
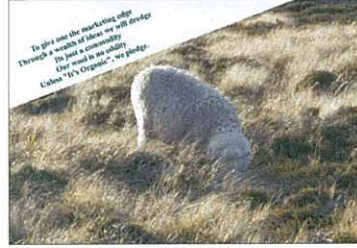
Abaca Abaca is a natural fibre that is made from the leaves of abaca plants. It is known for its softness, warmth, and durability. Abaca is also known for its biodegradability and low carbon footprint.	Hemp Hemp is a natural fibre that is made from the stalks of hemp plants. It is known for its softness, warmth, and durability. Hemp is also known for its biodegradability and low carbon footprint.
Coir Coir is a natural fibre that is made from the husks of coconuts. It is known for its softness, warmth, and durability. Coir is also known for its biodegradability and low carbon footprint.	Jute Jute is a natural fibre that is made from the stalks of jute plants. It is known for its softness, warmth, and durability. Jute is also known for its biodegradability and low carbon footprint.
Cotton Cotton is a natural fibre that is made from the seeds of cotton plants. It is known for its softness, warmth, and durability. Cotton is also known for its biodegradability and low carbon footprint.	Ramie Ramie is a natural fibre that is made from the stalks of ramie plants. It is known for its softness, warmth, and durability. Ramie is also known for its biodegradability and low carbon footprint.
Flax Flax is a natural fibre that is made from the stalks of flax plants. It is known for its softness, warmth, and durability. Flax is also known for its biodegradability and low carbon footprint.	Sisal Sisal is a natural fibre that is made from the leaves of sisal plants. It is known for its softness, warmth, and durability. Sisal is also known for its biodegradability and low carbon footprint.

www.naturalfibres2009.org

The Department of Agriculture Display...

Organics in the Falkland Islands

- FALKLAND ISLANDS**
- 10 Farms currently in the scheme
 - 2 Farms fully accredited this coming shearing season
 - 414,844 Hectares is in conversion
- WORLDWIDE**
- UK Organic market is worth over £1.75 Billion
 - The highest percentage of organic farmland is the Falkland Islands at 37%
 - Nest is Liechtenstein 30%, Austria 13%
 - 1 Million farms worldwide with 481 certifying bodies
 - Organics is taking off everywhere



Farm Improvement Programme

- Key Priorities:**
- 1 - Improved winter nutrition of breeding ewes/cows
 - 2 - Improved winter nutrition of hoggets/heifers and young steers
 - 3 - Effective grazing management to improve long term pasture productivity and animal performance
 - 4 - Targeted sheep and cattle genetic change to achieve defined breeding goals



Wool Clip Analysis

- What we need**
- Data
 - Wool certificates (copy)
 - Prices
 - Specifications
 - Farm statistics
 - Number of sheep in each mob
 - Number of shed staff
- Data Calculated for Individuals**
- 1 - Average micron
 - 2 - Average greasy and clean wool cut per head for different sheep classes
 - 3 - Average wool value per head for different sheep classes
 - 4 - Differences between fleece lines (in micron, yield etc)
 - 5 - Clip breakdown by weight (pie chart - fleeces, pieces, bellies etc)
 - 6 - Price breakdown information AWEX price comparison on the day
 - 7 - Comments

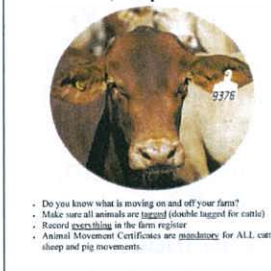


Photographs from the Rural Expo...



Above: Zoë Luxton explains the difference between fleece microns to visiting students from the Infant & Junior School. Rest of pictures: Woollen items on display from companies and individuals around the Falkland Islands

There was a young beast on the West Who didn't quite feel her best She had foot and mouth And when she went South The virus, she spread to the rest



Thank you to everyone who loaned the Department of Agriculture various items for us to include in our stand at the Rural Expo during Farmers' Week



FARM IN PROFILE: HOME FARM

Property Name: Home Farm

Location: Douglas Station,
East Falklands

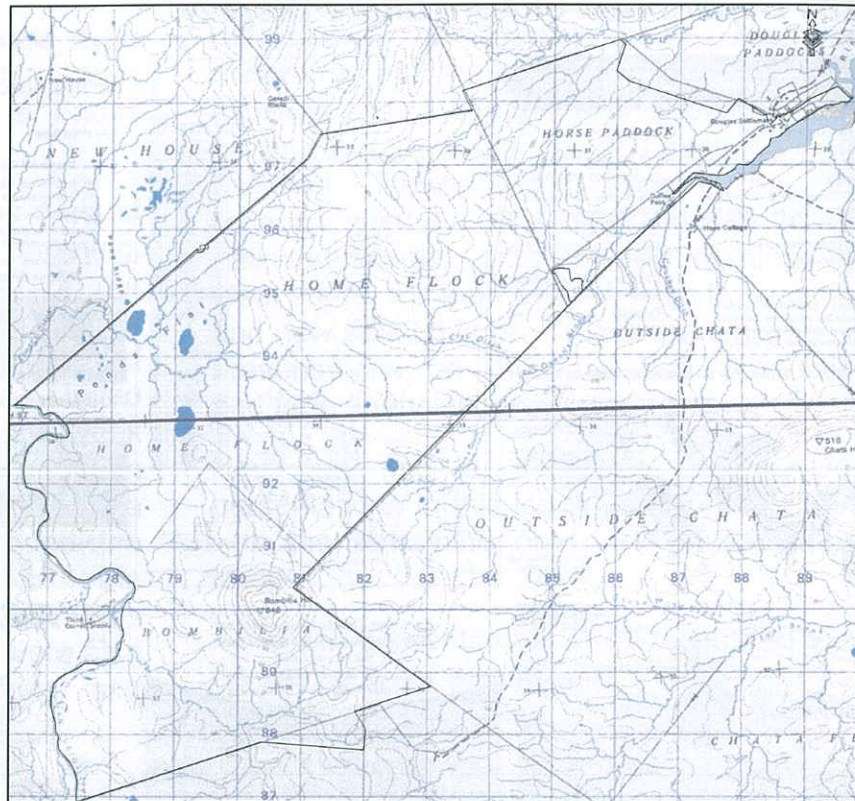
Owner: Tyrone Whitney

Farm Size: 6,232ha

Sheep: 2,600 (approx)

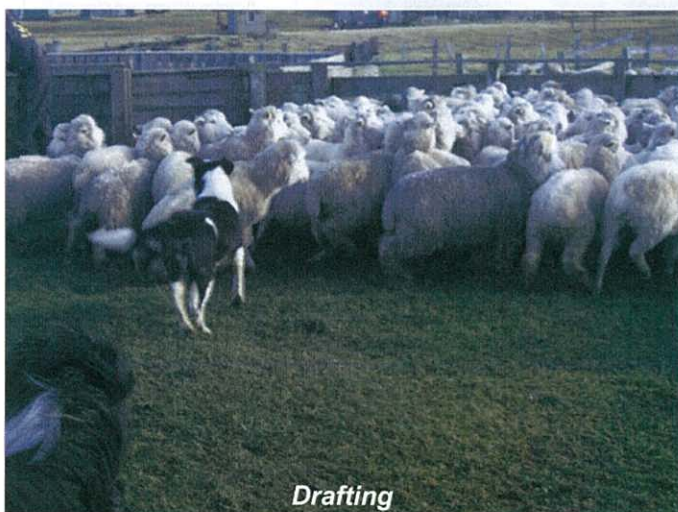
Cattle: 65

Tyrone Whitney has been running Home Farm since 2003 with partner Sara Hewitt, and purchased the property in 2006 from his father Keith. They run 2,600 sheep, split into two main flocks, on the 6,232ha farm.



Sheep

The first flock run by Sara & Tyrone consists of 500 ewes which are joined with Texel rams purchased from Fitzroy. The main purpose of this flock is to produce old season lamb for the abattoir. This season, Sara & Tyrone also supplied new season lamb. They now feel that this will be the best product for this flock as they have found that these lambs shed their teeth earlier than those in the Dohne cross flock with the added bonus of not having to find food for them in winter. The ewe lambs go back into this flock as shearlings and are joined as do all ewes from the other flock that have black wool or are wool blind.



Drafting

The second flock consists of approximately nine hundred 3yr+ Polwarth/Dohne ewes that are joined with pure Dohne rams for wool. With the help of forage crops and re-seeds, the shearing ewes from this flock are kept separately and are joined with the farm's best Dohne ram.

Cattle

When Sara & Tyrone started running Home Farm the cattle were mainly feral animals that had been quietened down (not tamed!). They have now eliminated them (although many of their offspring are in the herd) and now have a



Tyrone's Favourite Texel and Dohne rams

FARM IN PROFILE: HOME FARM

total of 65 quiet, mainly Angus X cattle, of which 31 are breeding cows. These are put to "Mr T" their pure-bred, very quiet, Angus bull.

All oxen of 24-30 months are sent to the abattoir along with any surplus heifers of the same age.

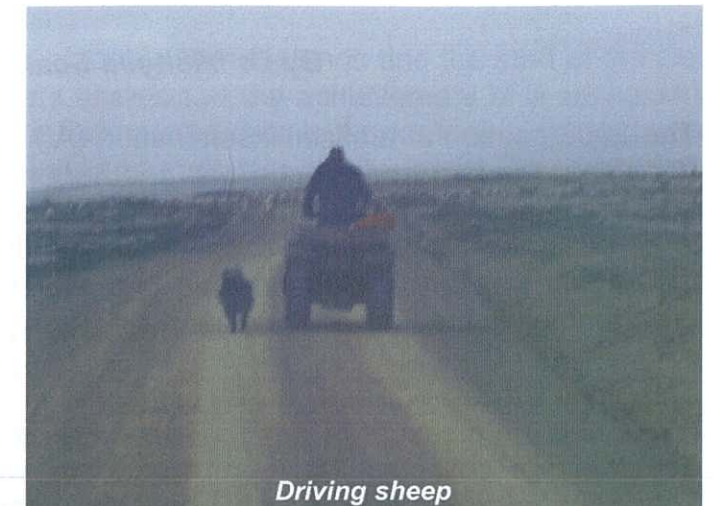
Changes

Sara & Tyrone are slowly putting into place managed grazing systems and the next change will be this season when they plan to drench their ewes before lambing (which will be at shearing as they pre-lamb shear) if required.

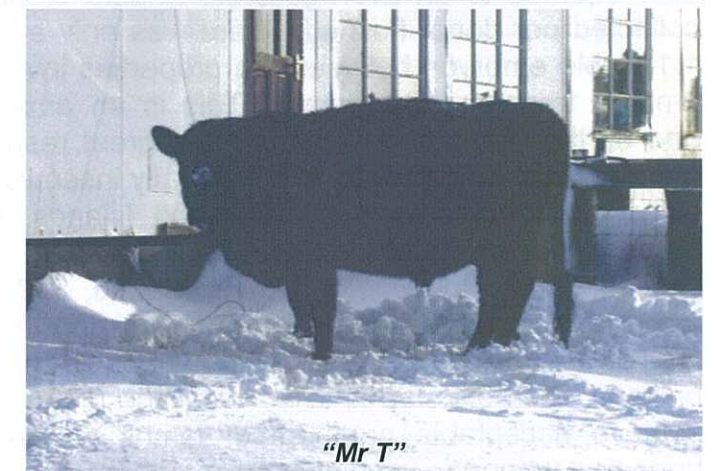
This change, along with follow-up drenching and the managed grazing system, will allow the ewes to lamb in spelled camps without deep ditches. They hope that these changes will help the Home Farm lambing percentage to rise.

In the next ten years, Sara & Tyrone would like to increase their ewe flocks to around 4,000, running half for lamb and half for wool production, but sticking with the breeds which they are currently using.

They hope to have the same amount of cattle of the same breed to continue to produce beef for the abattoir.



Driving sheep

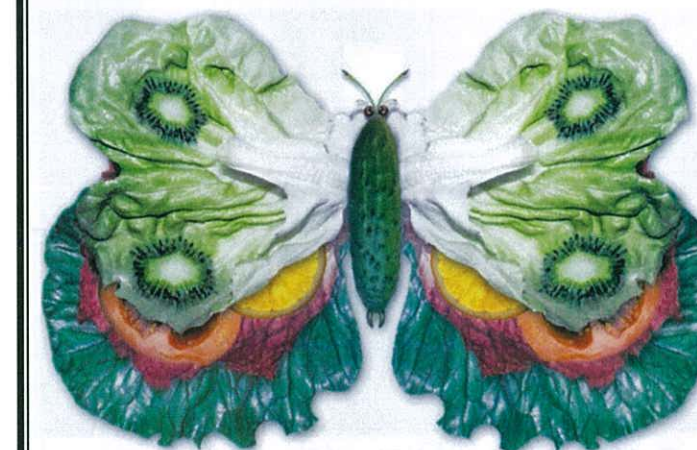


"Mr T"

Correction

In the Rincon Ridge Farm profile, the table values should have read price per kg clean, not nett fleece value as we reported. Apologies to Leon & Helen for this error.

SEEN ANYTHING STRANGE LATELY?!



**DON'T LEAVE IT...
...OR SHOOT IT**

**Call the Veterinary
Section on 27366**

**ACTIVE SURVEILLANCE
IS OUR BEST DEFENCE!!**

2009 SHEEP ARTIFICIAL BREEDING PROGRAMME IN THE FALKLAND ISLANDS

By Dr Michylla Seal, AllStock (WA) Pty Ltd

The 2009 season of artificial insemination (AI) and embryo transfer in the Falkland Islands was another enjoyable and successful season. As a company we are honoured to be involved in the programmes each year. As individuals we thoroughly treasure the friendships and experiences the programmes in the Falkland Islands have given us.

This year Hayley Willmott, an embryologist from AllStock (WA), had the pleasure of working in the Falkland Islands. Together we collected 1407 embryos from 183 donors. This equated to an average of 7.7 viable embryos being collected per donor flushed. There was only a variation of 1.1 viable embryos between the properties involved in the embryo transfer programmes. This is an amazing result and all the farmers can credit the great results to their management of the ewes. We artificially inseminated 1,353 ewes on farms around the Falkland Islands. Numerous breeds were involved in the artificial breeding season, including Texel, Poll Dorset, Dohne Merino, SAMM, Afrino, Bond Merino, MPM and Merino. Considering the dry summer and wet April/May the results achieved this year are brilliant. The next step is to maintain the pregnancies and achieve acceptable numbers of lambs on ground. We hope that when the lambing season approaches the weather and conditions are favourable.



Vet Michylla Seal flushes a donor ewe at Saladero

The Department of Agriculture has continued throughout the years to be an integral part of the programmes. Tony Mills had a crucial role in liaising with farmers to organise what programmes were to be performed and dispatching the programmes. The numerous emails and communication resulted in an exceptionally well-organised season that ran extremely smoothly. Thank you Tony for all your hard work. All the staff in the Agricultural Department are an extremely dedicated team and it has been an absolute pleasure again to work in such a friendly environment. Hayley and myself could certainly have not completed the programme without their assistance and devotion. We just hope they did not mind our bossy tendencies. The hospitality and kindness



Zoë Luxton prepares the next ewe for flushing



Embryologist Hayley Willmott inspects the embryos

of everyone we have met in the Falkland Islands is fantastic. Thank you to everyone for welcoming us into your homes and for being so well organised for the programmes.

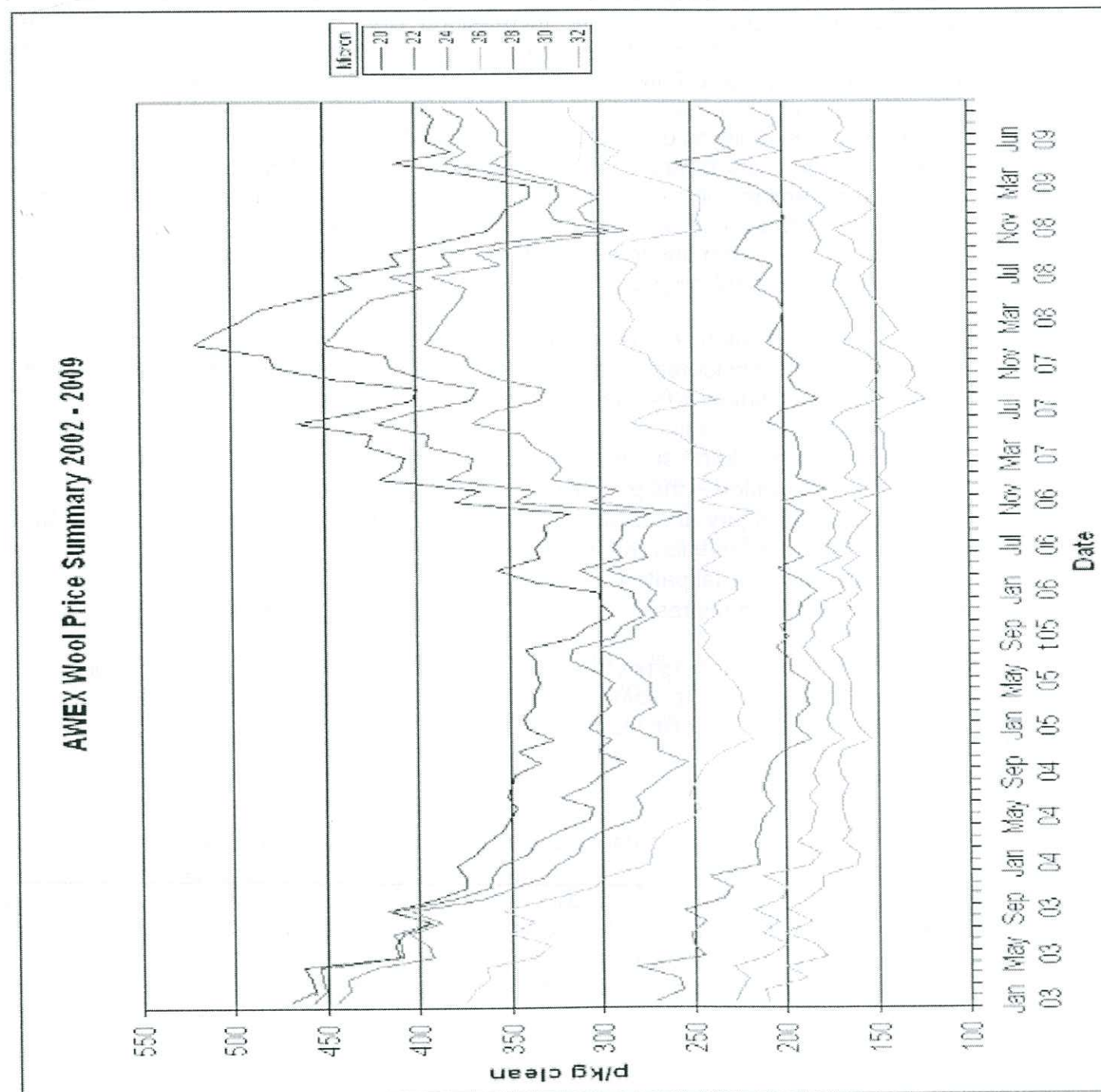
It was an absolute delight working with the farmers of the Falkland Islands and the staff of the Department of Agriculture. Dedicated staff and farmers assisted in the achievement of a successful season. If future opportunities arise to return to the Falkland Islands to work along side the farmers and Department of Agriculture, AllStock (WA) would be thrilled to be involved.

If we can be of any assistance in discussing programmes or sourcing sheep genetics please do not hesitate to contact us on mic@allstockwa.com.au



WOOL PRICE TREND OVER TIME

Based on weekly DoA Wool Reports



SHEEP – WELFARE ISSUES IN THE FALKLAND ISLANDS (PART 1)

By Steve Pointing

During the recent Farmers' Week presentations in the Town Hall I gave a talk on welfare issues with regard to the rearing of sheep in the Falkland Islands. Unfortunately due to a combination of factors I ran out of available time and also encountered technical problems with the projection equipment. I do think it is important, however, that some of my concerns in this area are fully discussed – even though they may make slightly uncomfortable reading for some of you.

Why is animal welfare an issue at all in the Falkland Islands – I can hear some of you asking? Well there is our own Falkland Island legislation covering welfare issues – much of it originally based on UK legislation in this area and, in particular, the 1911 Cruelty to Animals Act from which many other pieces of legislation flow. World-wide, welfare considerations are becoming increasingly important for the keeping and farming of animals. Practices that were once considered acceptable are now being re-assessed and modified or abandoned according to new knowledge and changing attitudes in society. Increasingly our access to international markets depends on our ability to provide quality assurance in a whole range of factors but, amongst these, demonstrably high animal welfare standards are a vital part of that assurance.

More and more of you are having to diversify your farm business in order to make ends meet and one of the growth industries is in farm tourism. This means that members of the public have ample opportunity of observing some of the practices that occur on farms throughout the year and whereas they may be second nature to most of you many of these people will be seeing these practices for the first time. Try and put yourself in their shoes and imagine how they might react to something which is commonplace to you.

Bearing the above in mind I will now draw your attention to some areas of sheep farming in the Falklands that need to be considered. Underlying all the welfare considerations are a set of 5 basic requirements – the so called 5 freedoms:

- Freedom from hunger, thirst and malnutrition
- Freedom from discomfort – the provision of appropriate comfort and shelter
- Freedom from pain, injury and disease – the prevention, or rapid diagnosis and treatment of injury, disease or infestation with parasites
- Freedom to display normal pattern of behaviour
- Freedom from fear and distress

Under normal Falkland Island farming practices I think all of the first 3 freedoms mentioned above could be said to be compromised to some degree or other at different times of the year. Let us explore some of these issues in more depth.

Food and water

The minimum standard is that sheep must be provided with access to a diet which is nutritionally adequate to maintain health and meet the appropriate physiological requirements of growth, pregnancy, lactation and to withstand cold exposure. Sheep must always have access to water even if they don't appear to want to drink it very often (this is greatly affected by the moisture content of the grass they are eating). Finally where provisions for health and vitality cannot be met sheep must be moved, sold or slaughtered on site to prevent any further suffering.

Feed

We know from various studies carried out in the Falkland Islands and from farmers' personal observations that many sheep lose weight during the winter months – some to such an extent that they will not survive the winter period. In effect these sheep are starving to death. You might say that you have seen them eating and that grazing is available but if the nutrient content of winter pasture is insufficient to meet the sheep's needs then they will surely lose weight and if this happens in a pregnant ewe it will affect the growth rate of the lamb in utero and the ability of the ewe to produce sufficient milk after birth. You might not be able to manufacture more feed for your sheep over winter but, at least, you can make sure that those sheep that require it most have access to the best feed on your farm during critical periods.

Water

Sheep should not be deprived of water for more than 24 hours, and in hot, dry weather for no more than 12 hours. Is this usually the case on your farm?

Shelter

Shelter should be provided for sheep especially in cold, wet and windy conditions (the typical FI climate for several months of each year), at lambing and after shearing. Very young lambs are particularly susceptible to hypothermia especially if they are born in wet or windy conditions. You should also be aware that if ewes are inadequately fed prior to lambing they may choose to graze soon after lambing rather than seek out suitable shelter for themselves and their lambs thus exposing their lambs to the full effects of inclement weather.

Lambing

The main cause of neonatal lamb mortality is starvation and/or hypothermia and/or mismothering. All of the aforementioned are interconnected to some extent. Lambing paddocks should be chosen so as to provide good shelter and be easily supervised. How often do you go around your lambing paddocks in the lambing season? If the ewes are in good body condition when they lamb the chances are that they will produce an adequate supply of milk thus giving their lambs a better start in life. That first feed not only provides the lamb with antibodies against various diseases that it might encounter but is also an essential fuel to help keep it warm.

Castration/tail docking

Both of these procedures should be carried out as humanely as possible before lambs reach 10 weeks of age. The preferred method of tail docking is to use a rubber ring or hot searing iron – the latter appears to be the most popular method used in the Falkland Islands and almost certainly gives less pain to the lamb for a shorter period of time than using a rubber ring. Remember not to cut the tail too short – it should be left long enough to cover the vulva in a ewe lamb and the equivalent length for a ram lamb.

This is as far as I got with my presentation during Farmers' Week. I will continue with the rest of this article in September's Wool Press. As always I'd be very interested in receiving any of your comments about any of the issues raised so far.

FOR SALE

1 12volt shearing machine - price £350 Please contact Hew 32235 or Sue 32290

MOVING THE NATIONAL BEEF HERD

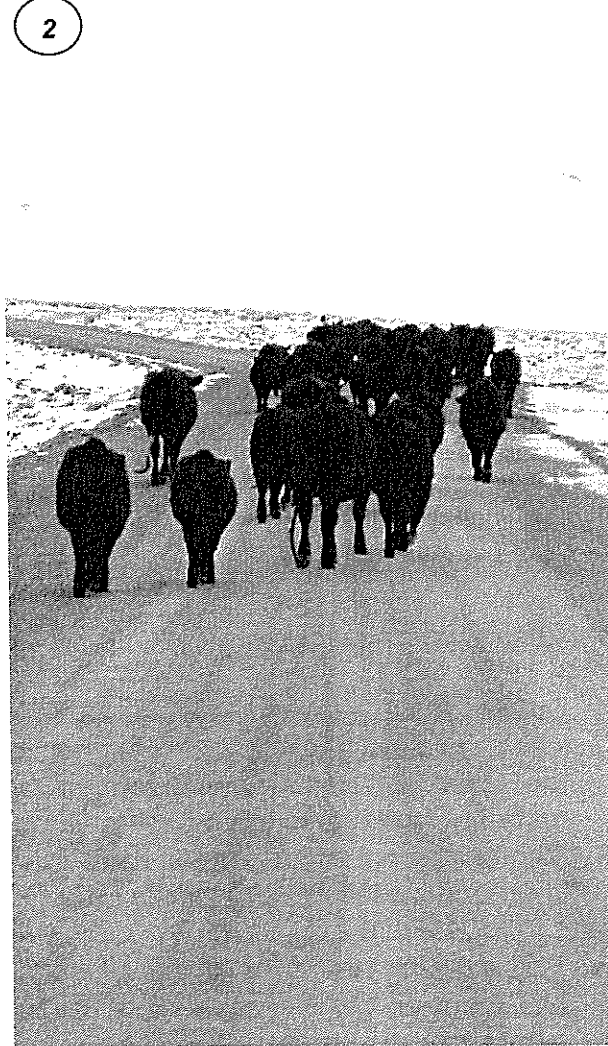
By Diana and Brian Aldridge

The National Beef Herd arrived at New Haven on Saturday 27th June to take up their residence at Saladero.

We collected the cattle off the Concordia Bay at about 1.30pm and proceeded to drive them to Paragon for the night. The drive went really well and we arrived just on dark at 5pm. We went back and collected them bright and early Sunday morning to bring them the rest of the way. Sunday went really well also and we got them into the cattle yards and drafted them into their relevant herds very quickly. We did this straight away as it was a good opportunity for them to walk through the yards quietly without any work being carried out on them.

They have settled in really well and all the cows are now on the coast in Rabbit Island Camp and the weaner calves are in the Little Pond paddock for the time being.

A big thank you to Gilberto at Goose Green for giving us a paddock for Saturday night otherwise it could have been interesting in the dark with 50 head of very black cattle!



1 ~ NBH arriving at New Haven
 2 ~ NBH on the move
 3 ~ NBH finally through the gate at Saladero
 4 ~ NBH home in the cattle yards

BEEFING UP THE FUTURE

By Mac McArthur

The National Beef Herd is now back at Saladero and as the attached article by Brian and Diana indicates, they are settling in well to their surroundings.

Rodney and Carole Lee decided that they no longer wished to manage the herd because of other time commitments to their businesses. They have done a super job with the herd particularly in making sure that the weaners were quietened for life by yarding, feeding hay and walking amongst them for 2-3 days when they were weaned each year. They have also ensured they have been properly tagged, weighed and preg. tested and generally well managed at all times. Thank you Rodney and Carole and staff.

Bringing the herd back to Saladero means there will be a greater opportunity for farmers, Councillors and others, through appointment with Brian or on Saladero open/field days, to view the NBH cattle herd. The genetic improvement through the use of some of the most productive Angus seed stock genes in the world, that suit the Falkland Islands young beef turnoff, will be able to be viewed and discussed.

Also herd management techniques to select high producing cattle through performance recording and the role in grazing management and pasture improvement that is being instigated using cattle will be able to be viewed and discussed.

There are eight well muscled and growthy weaner bull calves sired by NBH embryo transfer bulls and the best of these on performance test will be grown out to be available for sale or lease as 15 month old bulls to farmers throughout the Islands.

We will also be looking at factors such as rate of weight gain and fattening rates for young cattle under commercial grazing conditions as well as yield of saleable beef.

By having the NBH closer to Stanley, DoA staff will be able to be more closely involved in the management and genetic improvement of the herd as well as hearing feedback from farmers and others who visit and view the herd from time to time.

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Half Page	£10.00	£15.00
Quarter Page	£5.00	£7.50
Personal Ads	£3.00	-
Flyers	contact us for details	

**Send your adverts to Siân Ferguson,
 Department of Agriculture by post, fax
 27352 or email sferguson@doa.gov.fk**

A. Anderson

Organic meat farmers fight to meet demand

By Necia Wilden
Article from: *The Australian*, 4th July 2009

FOR Shane and Ann Blundy, making the decision to switch to organic farming 16 years ago was easy. "When I was farming conventionally, the animals kept getting sick," Shane says. "The only person making any money was the vet."

Now, with 3000 lambs and 1000 cattle on their 485ha south Gippsland property, Cherry Tree Organics, the Blundys' biggest problem is how to keep up with demand.

Despite the economic downturn, the resulting dip in growth for the organics sector, the drought and sharply rising retail prices for lamb, the Blundys are selling 20 to 30 per cent more animals than they were this time last year.

They are not particularly surprised, rattling off a string of reasons for the spike in sales of a relatively expensive organic product: from the flurry of interest in provenance to widespread concerns about health.

"People are becoming more aware of what they're putting in their mouths," Ann says.

"They're worried about artificial colours and flavours and additives, and they're starting to ask

more questions than they used to."

The Blundys oversee each step of their animals' progress from farm to fork. Certified organic, grass-fed Angus and Hereford cattle are slaughtered in an organic Gippsland abattoir, dry-aged for up to four weeks and boned in an organic boning room before meeting their retail or restaurant consumer.

About half the meat is sold to butchers in Victoria, many of whom age the carcasses themselves in-store before selling it for an average of 10 to 20 per cent more than for non-organic meat. In contrast, Shane says, a lot of conventionally processed animals are hot-boned, a cheap and easy technique that results in inferior quality meat. "A lot of people think organics is some new-fangled thing, but we're just reviving old traditions," he says. "We all used to eat organically -- our grandparents ate organically, before the introduction of artificial fertilisers and pesticides."

As small-scale producers, the Blundys are not interested in expanding their business beyond what is sustainable. "I had one large retailer say to me, 'we're really keen to stock your spring lamb year-round'," Shane says. "Some people just don't get it."

Sheep Owners Association Woolpacks.

The Falkland Islands Sheep Owners Association has for a number of years bulk purchased heavy duty woolpacks and clips for resale at cost to the sheep farmers in the Falklands. There are barely sufficient woolpacks in stock to meet normal demand for next season so we are debating at present whether there will be a requirement to increase stocks at this point in time.

Would all farmers that purchased woolpacks for last season please contact any of the Directors in an effort to determine a more exact quantity that will be required for next season.

Those farms that reply to this circular would be given first option to remaining stocks if it is calculated after consultation that present stocks are sufficient for a full season.

Please reply by 15th August at the latest.

Current directors are;

Raymond Evans
Jimmy Forster
Nigel Knight
Nick Pitaluga

Caption Competition Answers

- Ray Hansen at Hill Cove "I don't weigh as much as you think"
- Jennifer Hill from Stoney Ridge "If I can find a cart will you take my sheep to the abattoir"

Dates for the Diary

Dog Dosing (Droncit)
Please remember to contact the veterinary service on telephone no 27366, fax no 27352 or email imports@doa.gov.fk and advise when your dogs have been dosed.

12th August
15th August
1st September

Dog Trials at North Arm
Start of the 2009/2010 Trout fishing season

Recipe Spot

From Jenny Luxton, Stanley

Squid Provençale

Ingredients & Method:

2 tbsp olive oil 1 onion - sliced
¼ pint dry white wine
4 tbsp water
2 tbsp brandy
2 cloves garlic - crushed
14 oz can chopped tomatoes
Rosemary
Salt/pepper to taste
1 green pepper - sliced
1 tbsp tomato puree
1 lb cleaned squid - sliced

Fry onions, garlic and pepper in oil until soft. Add wine and reduce heat. Add remaining ingredients, except brandy and squid. Simmer for 10 minutes. Stir in brandy and cook for one minute then add chopped squid and stir until it has changed colour and cook for three minutes.

Alternatively:

Made sauce. Stuff whole small tubes with feta cheese, lay in open pan and pour the sauce over. Cook for 20-30 minutes until colour has changed.

Serve both as a starter, or a main course with rice.

For a BBQ: Stuff squid with feta and marinade in olive oil, fresh garlic and herbs overnight. Chilli can be added to Provençale sauce to make it picantie if you wish.

If you enjoy recipes other people have contributed to the Wool Press, why not send in your own favourites to share?

Last Month's Solutions

1	4	6	9	8	3	5	7	2
9	2	5	6	4	7	1	3	8
7	8	3	1	2	5	4	6	9
2	3	1	5	6	8	7	9	4
8	7	9	4	3	2	6	1	5
6	5	4	7	9	1	8	2	3
3	1	2	8	7	4	9	5	6
4	9	7	2	5	6	3	8	1
5	6	8	3	1	9	2	4	7

LANDS	Flat Lands	STONE	Corner Stone
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Brainteaser
12 miles away: consonants are worth 2 and vowels are worth 3.

If you would like to see a particular type of puzzle in the Wool Press, then please let us know!

PUZZLE PAGE

Word Search - all things veterinary

A I S A N A H T U E A B B P H J A Z E I
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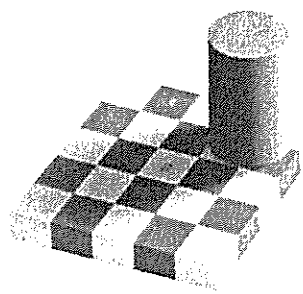
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 Microchip
 Import Permit
 Health Certificate
 Neuter
 Consultation
 Trimezazine
 Hibiscrub
 Boat Inspections
 Synulox
 Appointment
 Biopsy
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 Operation
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 Euthanasia
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Sudoku

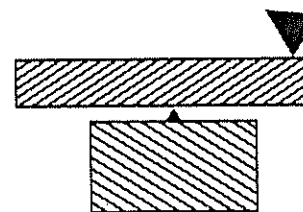
Each Sudoku has a unique solution that can be reached logically without guessing. Enter digits from 1 to 9 into the blank spaces. Every row must contain one of each digit. So must every column, as must every 3x3 square.

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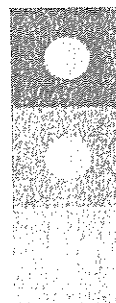
Illusions



Top Left:
 Are the squares A and B the same colour?



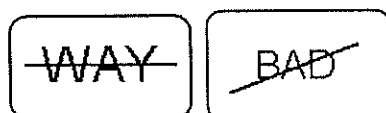
Bottom Left:
 Is this a level balance?



Right:
 Same colour centres?

DingBat Brain Games

Flex your brain, free your mind and think laterally



Hint: Describing out loud what you see may give you the clue you need!!

Brainteaser

Last week, I travelled from London to Stoke. On the first day I travelled one half of the distance. On day two, I travelled one third of the remaining distance. On day three, I travelled three quarters of the remaining distance. Yesterday I travelled one half of the remaining distance. I now have 5 miles left to travel. How far is it from Stoke to London in total?

THE WOOL PRESS

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Telephone +500 27355

Fax +500 27352

sferguson@doa.gov.fk

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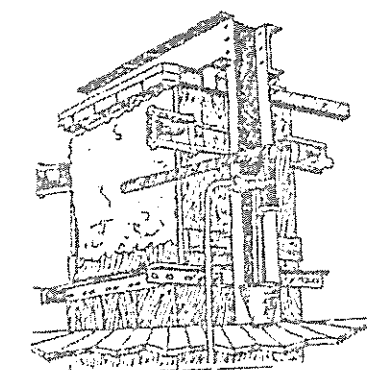
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EDITORIAL

With the new structure of Government coming into place on 1st October the Department of Agriculture, together with the Department of Fisheries, will become the Department of Natural Resources, headed by John Barton. So this will be the last editorial that I will write for the Wool Press. It has been a privilege to head up the Department since January 2004. A great deal has been achieved by the staff and I am confident that progress will continue unabated in assisting farmers to grow more high quality wool and meat under John's leadership. You have a great team to work with, John.

This month's Wool Press has a wide variety of articles so there is something for everyone to dip into. Thank you to Hew Greirson for providing real data with Ian Campbell for the article on the most profitable sheep breed. The bottom line in this case favours a dual purpose breed.

September sees the need for burning permits again so Andrew Pollard's article from a presentation on burning issues from Farmers' Week is timely. After discussions with farmers, the guidelines have been amended to assist with safe reseed burns but note the need to give the Department 48 hours notice please when applying for a permit to burn so that all the related agencies can be informed. Permits can be extended. It was particularly interesting to read Ailsa Heathman's article from 1932, (thank you Alisa for this fascinating circular issued to shepherds at North Arm in those days) where white grass burns were prohibited after 1st October. This is in line with what we have in place today.

Andy has also edited his Farmers' Week presentation on growing grazing crops and pasture where he highlights one of the challenges faced by farmers, which is soil moisture retention in summer. Do contact him if you want assistance with analysis of crop successes and failures.

Congratulations to the Robertson family on their centenary at Port Stephens. I am sure they will celebrate it down in "God's Own Country". Thank you Paul and Diane and Peter and Ann for sharing your farm enterprise details with readers.

Zoe Luxton's article on cobalt deficiency, one of a series of articles she intends writing on dietary trace-elements and macro-element deficiencies, is an issue that the Robertsons along with other farmers, are only too familiar with. It is important that the DoA builds on previous knowledge and research as Zoe does in her article.

As promised, Steve Pointing has published his second article on welfare issues. It is well worth reading through his account to remind ourselves of what is best practice. And Mac McArthur's article on handling stock supports Steve's points. If you dip into the article from Alisa from 1932 where the shepherds were advised how to drive sheep, it is exactly the same message!

All the best with lambing and the spring activities.

Phyl Rendell
Director of Minerals & Agriculture

*Next Dog Dosing Day
23rd September (Droncit)
Please remember to contact the Veterinary
Service on telephone no 27366, fax no 27352
or email imports@doa.gov.fk
and advise when your dogs
have been dosed.*

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SHEEP – WELFARE ISSUES IN THE FALKLAND ISLANDS (PART 2)

By Steve Pointing

This is a continuation of the article I started in the August edition of the Wool Press and covers those slides I did not manage to talk about when giving my presentation during Farmers' Week. Please refer back to the August article to refresh your memories as to why welfare issues have become such a hot topic these days.

Restraint

Sheep should not be caught, dragged or lifted by their wool. Generally sheep should be handled or restrained by means of an arm under the neck and an arm around the rump. Try not to keep sheep on their side or on their back for more than a few minutes especially if they have a full rumen or they are heavily pregnant.

Gathering and yarding

Sheep should not be yarded for periods of more than 24 hours unless feed and water is provided. Dogs should not be used excessively and when you know that certain dogs are prone to biting sheep then these should be muzzled during work. Sheep should be moved slowly and quietly; take precautions to avoid smothering of closely yarded sheep. Sheds and yards should be designed, constructed and maintained to minimise injury to sheep.

Shearing

Shearing sheds and equipment must have regular maintenance checks and shearing equipment should be kept clean. Sheep should not be shorn if the forecast is for cold, wet weather and remember the wind chill factor in the Falkland Islands. Shearing must be carried out skilfully and carefully to ensure that shearing cuts are kept to a minimum. Extensive or severe cuts must be treated as soon as possible. The welfare of the sheep is the responsibility of the farm owner or manager and if you are unhappy with the way sheep are being handled you should make your concerns known to the shearing gang leader.

Pre-lamb shearing

Don't pre-lamb shear within 4 weeks of lambing. If you decide to pre-lamb shear then effective shelter MUST be available. The ewes MUST be well fed because if they are hungry they may choose to graze rather than shelter with their lambs. Newly shorn sheep require up to 40% more feed for 3 weeks or more after shearing to sustain body temperature and maintain body condition. Maintenance requirements may be increased for 6 to 8 weeks post shearing. The use of cover or snow combs is strongly recommended.

Marking and tagging

Remember that ear tissue is very sensitive. The ear marking tool should be kept clean and sharp. If using plastic or metal tags try and keep the number of tags to an absolute minimum. When tagging take care to avoid cartilage ridges and large blood vessels.

Diseases and their control

All sheep in which injury or disease is or seems likely to be causing severe or persistent pain, or distress, severe malaise or emaciation must be treated. If the appropriate treatment is not known

or not available, a veterinarian should be consulted or the sheep humanely destroyed without delay.

Internal parasitism

Gastro-intestinal parasitism is a threat to production in grazing sheep throughout the Falkland Islands. Control of internal parasites is essential to ensure good health, production and welfare of Falkland Island sheep.

Humane slaughter

Injured or sick sheep should be slaughtered in an humane manner by a competent person. The preferred methods would be the use of a .22 calibre rifle or pistol or a captive bolt stunner. Particular care needs to be taken when using a free bullet both for the operator and anyone else who might be in the vicinity. Clubbing is permitted but only for very young lambs which have a thin skull and cutting of the throat can be used only in emergency situations where no firearm is readily available.

Transportation between farms and to the abattoir

Handle sheep with care during the loading process. Leave sufficient room for sheep to be able to stand and move about but not too loosely packed to avoid injury during the journey. Provide protection from adverse weather conditions during the journey. Ensure that there is adequate ventilation especially in warm weather or on particularly calm days or when the vehicle is stationary. Drive carefully and at a sensible speed to avoid sheep being thrown about in the back of the transporter. Handle sheep carefully when offloading at the final destination.

The manner in which sheep are handled and managed in the Falkland Islands is not the same on all farms. Different practices have developed on certain farms down through the ages. It is useful to see how other farmers carry out certain management tasks – you can learn from them and they might be able to learn from you. However you go about your daily business there are certain minimum standards that have to be adhered to by all farmers. Having read this article and the previous one are you happy in your own mind that you are meeting those minimum standards?



BURNING ISSUES

By Andrew Pollard

During Farmers' Week a discussion was held on the issues surrounding burning. It is good to remind ourselves as to why burn at all in regards to establishing crops and pasture:

- There needs to be a good soil to seed contact
- Surface trash leads to the tying up of valuable nitrogen
- Gives a more even seed bed
- Allows equipment to work more effectively (particularly the direct drill)

Until an alternative is found (there may never be) burning is an essential process in establishing crops and pasture.

There was a review of the terms and conditions associated with burning and the key outcomes were:

- The Director of Agriculture must be contacted in writing (email or fax) giving 48 hours notice to obtain a burning permit
- Prior to burning, the Chief of Police and all farms within a 2 mile radius must be contacted

It is essential that a tractor and rotavator are on site (at the least). The guidelines previously recommended that 4-6 persons are on hand when burning, it is felt that 2 persons is adequate.

When applying in 2009 farm maps will have to be attached with a precise location of the intended burn.

Prior to Farmers' Week the DOA asked numerous farmers for their views and successes/failures with burning on their own farm. Seven responses were received and some of the comments are shown below:

"We never rotavate a firebreak before burning as we have found that although it will stop a main burn the end result is far worse. As soon as the fire reaches the rotavation the mixture of dry top soil and wet subsoil is ideal for a smouldering fire that can burn for a considerable time. These smouldering fires are liable to break out at any time and are sometimes quite difficult to detect".

With Diddle-Dee "a light rotavate, just chopping the vegetation (not touching the ground) can have the effect of making strips that dry a lot quicker than the main so can be burnt without setting fire to the lot"

"Burn with a steady breeze"

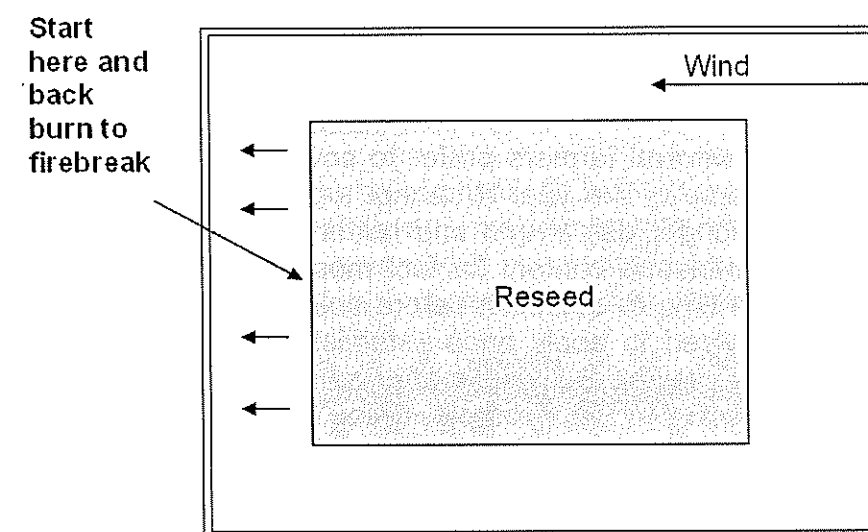
"I always light in the afternoon, the cool evening air will knock back a fire"

"No fire is under control until it is out"

"Have spare days behind the day of the burn to deal with it, if you have to do something else tomorrow don't light it today"

There was a common perception that the rotavated firebreak on its own was often not adequate.

Two farmers came up with a very interesting alternative, a slight adjustment of the current recommended practice.



The main difference being that the firebreak is not around the edge of the reseed and is instead 5, 10, 20 metres (whatever you determine) away from it.

Could the risk could be reduced further by burning the section between the reseed and the firebreak early (like a camp burn)? The reseed will be too wet to burn and the firebreak will have plenty of moisture.

I am not suggesting that you follow this same model, but I do recommend that you look at the present method of burning trash, evaluate the risk areas and determine whether any changes can be made to improve this.

For the good of farming it is essential that farmers communicate and work together in developing improved burning strategies particularly with those that are newcomers to farming.

GROWING AND GRAZING CROPS AND PASTURE

By Andrew Pollard

During Farmers' Week a discussion was held on the successes and failures of growing crops and pastures, and their subsequent management once established. The presentation was mainly a pictorial slideshow.

Starting off, we discussed the factors that define a good pasture/crop such as:

- Yield
- Plant density
- Evenness of cover
- Leaf versus bulb (brassicac)
- Health of crop (not nutrient deficient)

We then went on to discuss some of the reasoning's behind crop or pasture failure:

- Soil fertility (acidic soil, aluminium toxicity, fertiliser etc)
- Seedbed quality (surface trash, planting into ash after burn, evenness etc)
- Seed (applied rate – too high, too low, germination of old seed, right species/cultivar etc)
- Human error (planting/cultivation errors, bad fertiliser spreading, bad selection of timings such as sowing dates etc)
- Site selection (physical aspects of site such as soil depth, aspect, shelter etc)
- Weeds (particularly in relation to multiple crop sites)
- Environmental conditions
- Soil moisture

Whilst rainfall is considered important, soil moisture is the more important factor when establishing crops and pasture. Soil moisture is a combination of rainfall, hours of sunlight, temperature, wind, soil depth and cultivation etc.

It was very interesting that several farmers prefer to sow around Christmas time, as there was guaranteed rainfall at that time of the year (I cannot argue as it always rains at the Christmas sports!!). However, due to longer day length and hotter temperatures, this rain does not really have much impact on soil moisture content (in fact most probably runs off or evaporates). It is critical that plants are given time to establish before soil moisture declines. If the intention is to apply nitrogen fertiliser (advised to apply once established, as during germination the seed is supplying the nutrients. This may be 2-3 weeks after sowing) adequate soil moisture is essential for the fertiliser to work effectively. For example, if you sow on the 1st December this does not leave you much of an opportunity to apply the fertiliser before soil moisture declines.

Cultivation assists in soil moisture loss. Why cultivate if weeds are not a problem? If weeds are a problem what types of weeds are present? Sheep's sorrel can become more of a problem if rotavated as it actually chops the roots into hundreds of root cuttings which all turn into new plants. If weeds are a problem then herbicides are another option.

Planting can also assist in extra soil moisture loss. Direct drilling causes minimal disturbance and also has the advantage of more accurate seed rate calibration, seed depth placing, phosphorus fertiliser placement etc. It does of course have the disadvantage of being slightly slower and more expensive to purchase than the alternative air seeders (Einboch) or broadcast and harrows.

Soil moisture, in my opinion, is one of the biggest issues we have to focus on in relation to failure. The Falkland Islands has a dry summer climate (some people in their locations are luckier than others). I ask though, are we doing everything we can do to preserve soil moisture? This is why

we have been asking people many questions in relation to their FIP plans this year, particularly with sowing dates.

Discussion on grazing management looked at effective strip grazing with photographs demonstrating poor and excellent individual cases. Plant quality was discussed in particular relation to oats and legume pastures such as those containing Maku lotus (whilst the flower looks good it also represents a reduction in plant quality).

The session also included a brief discussion on Managed Intensive Grazing. Unfortunately, there was not much time left for discussion on this subject. A Wool Press article will be presented next month on this topic, particularly focussing on recording paddock records.

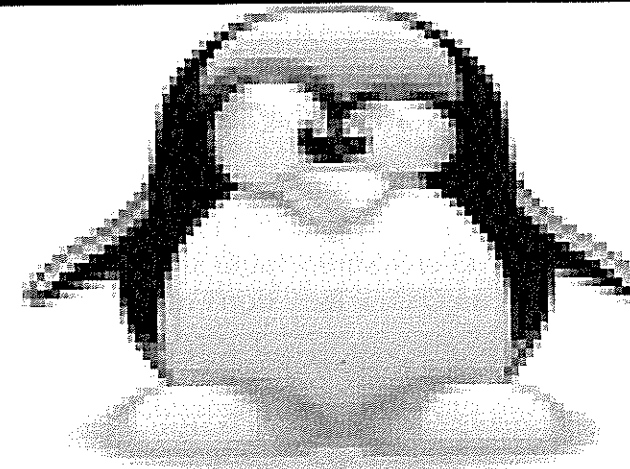
Last of all, we summed up what could be done on farm over the next season, with regard to the farmers themselves, but also how the DoA can assist. This included:

- **Record information and observations** – take digital photos, have a look 2-3 weeks after planting, record the quantity and type of animal put on and taken off a pasture etc, look at crop after severe gales etc.
- **Take measurements and monitor** – do you know the yield of the crop/pasture? With regard to, quality take a sample prior to grazing and freeze it so we can discuss at a later date. Weigh/body condition score animals.
- **Trial ideas** – if applying fertiliser leave a small strip without and vice versa if you choose not to use fertiliser Sow a strip of oats at 120 kg/ha or 80 kg/ha to compare back to the rest of the paddock sown at 100 kg/ha. It is advisable when trialling to do the normal and then alter a small area.
- **Talk to your neighbour** – Two farms next to each other sharing similar climatic conditions can learn a lot from each other (a difference of 2 weeks in sowing for example), utilising an einboch versus a direct drill etc.

Evaluating crop/pasture failure with little information put in front of you is often very difficult (often just a field inspection). Any extra information increases the chances of us solving some of these reasons for an individual farms crop/pasture failure.

The DoA will try to provide assistance as required, to help to understand the reasons for crop/pasture failure and similarly to assist in any measurements and review methods of grazing management. Please contact us (in advance) if you require any assistance and we will try to provide some answers. If you don't contact us we will assume all is OK.

SEEN ANYTHING STRANGE LATELY?!



***DON'T LEAVE IT...
...OR SHOOT IT***

***Call the Veterinary
Section on 27366***

***ACTIVE SURVEILLANCE
IS OUR BEST DEFENCE!!***

WHAT IS THE MOST PROFITABLE SHEEP BREED?

By Ian Campbell, Department of Agriculture & Hew Grierson, Blue Beach Farm

Producing a lamb for slaughter is a tough ask in the Falkland Islands from any breed of sheep. Dual Purpose sheep produce a pretty good fleece return but maybe we are compromising lamb production by using them. Meat or crossbreed ewes might produce a better lamb or more lambs, but have a poorer fleece return. How does the comparison work out economically?

Lets examine 2 hypothetical farms, A and B

Farm A

3,000 dual purpose ewes
Ewes cut 2.0 Kg 24 μ wool
60% lambing
900 OSL lambs sold at £16
All lambs are shorn
Nett ewe wool sale £18,630
Nett lambs wool sale £7,760
Lamb sale income £14,400

Nett Income **£40,790**

Farm B

3,000 meat type ewes
Ewes cut 1.8 Kg 30 μ wool
70% lambing
1,300 NSL sold at £20
Only replacement ewe lambs are shorn
Nett ewe wool sale £5,538
Nett Lambs wool sale £1,050
Lamb sale income £26,000

Nett Income **£32,588**

Clearly in this example the loss of wool income in the meat flock is greater than the gain in income from the lambs. Dual purpose sheep are more profitable than meat sheep.

Let's look at some of the assumptions. Each farm is running 3,000 ewes. The meat sheep may be a bigger sheep with a higher lambing percentage and hence a higher DSE rating (nutritional requirement) however on this farm the lambs are sold as NSL (New Season) and hence are not carried as long - so effectively the stocking rates are similar.

The 24 μ wool used in the example is pretty conservative. Many flocks are a couple of microns below this already. The 24 μ wool is valued at 373p/kg clean and the 30 μ wool at 172p/kg. A standard £1.25/head has been taken off for shearing and freight of all fleeces. Wool prices do fluctuate and this will change these figures. For the meat sheep to become more profitable their wool value would need to be discounted by less than 100p/kg below the dual purpose wool value.

It is assumed the meat sheep produce more lambs, more valuable lambs, and lambs that are sold as new season (NSL) rather than old season (OSL).

A decision to change an existing dual purpose flock into a meat breeding flock will be a hard one to reverse. Battling to reduce micron over the dual purpose flock will take years, but we have shown it is possible at the DoA with the National Stud Flock, and others like Hew have done it with specific types of Merino or other dual purpose sheep. A single outcross to a meat breed will blow the micron of that ewe replacement out by a good 4-5 microns, and a reversal will take several generations to get back to where you started.

Dual purpose sheep also allow the option of keeping wethers on for wool production if situations change, whereas there is not much you can do with a crossbred lamb that has missed the market. However, there is some flexibility to finish them as OSL if they don't make the grade as a NSL.

If you think we have this wrong please let us know. We have a spreadsheet which we can easily put your renewed assumptions in and let's see what your figures look like.

WOOL PRICE TREND OVER TIME

Based on weekly DoA Wool Reports



Burning Permits 2009/10

Burning permits are required for anyone burning land after September 15th.

Please apply in writing to the Department of Agriculture (email: kstephenson@doa.gov.fk or fax: 27321) giving details and a map of the area to be burnt at least 48 hours prior to wanting to carry out the burn.

Please note that grass fires will only be permitted on wet white grass flats on weekdays during September and no permits will be issued for burns after 30th September due to drier conditions increasing wildfire risk and increasing environmental impact.

Please ensure the guidelines available from the Department of Agriculture are followed when considering burning trash from cultivated ground this summer.

Phyl Rendell
Director of Minerals & Agriculture
26 August 2009

FARM IN PROFILE: PORT STEPHENS

Location: Port Stephens

Owner: Ann and Peter Robertson

Manager: Paul Robertson

Size: 22,537 ha

Sheep: 10,500

Cattle: 100 approx

One hundred years ago to the year, Peter Robertson's grandfather became manager of Port Stephens. Since then, there have been five Robertson managers with Peter and Ann's son, Paul the current one. Peter's brother managed it for one

year. It has been forty years this year, since Peter returned to the farm, which he and his family commonly refer to as "God's Own Country".

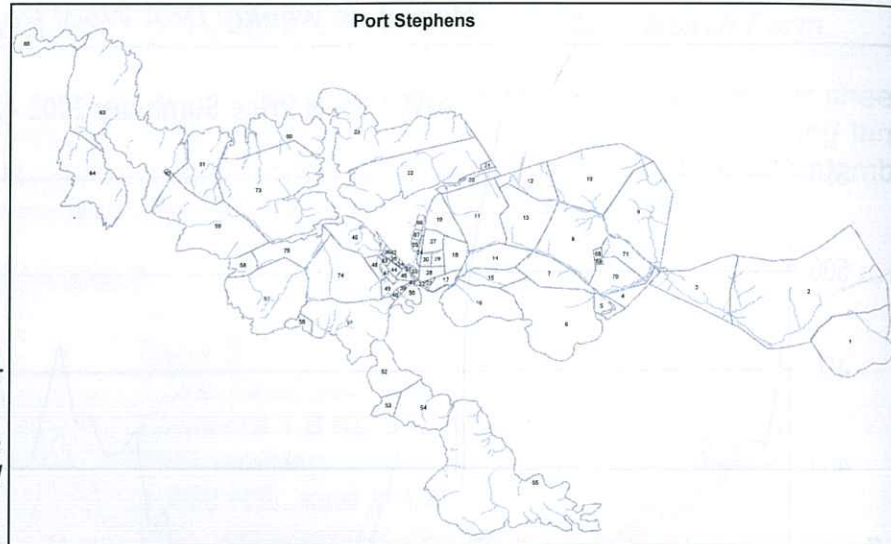
The original FIC farm of Port Stephens, which was 250,000 acres, was sub-divided in 1988. It was divided into five farms with a nominal 10,000 sheep on each farm. At the time of the sub-division it was the third biggest wool producer in the Islands.

Cattle

Port Stephens runs approximately 100 head of cattle of which some are kept for milking and home consumption. The remainder are bred for commercial purposes, however this venture recently became defunct due to transportation and market issues. Whilst the Robertsons started out planting crops as autumn feed for cows with calves at foot, it has become winter feed for hoggets.

Sheep

Port Stephens also currently runs 10,500 sheep. The Robertsons have reduced their hogget micron

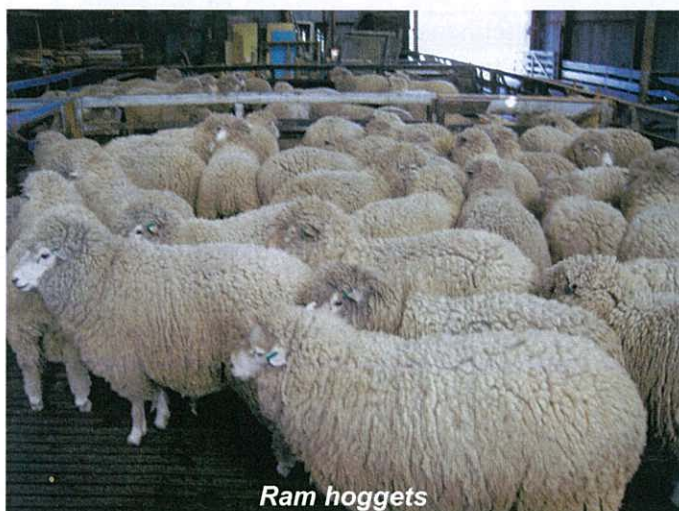


to 21.5 and have an average farm micron of 25.25. They have decided that they will probably keep it at this and start trying to tighten up the micron range and work on the wool style.

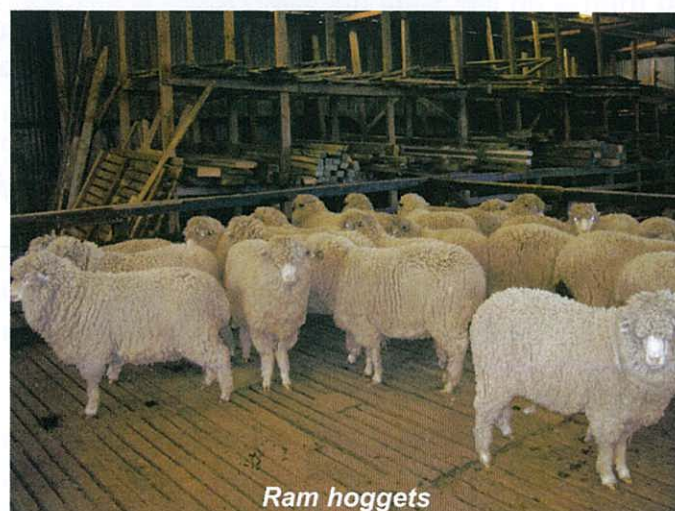
Port Stephens is traditionally a Corriedale farm, however, over the years there have been influences from all sorts of breeds; most recently Dohne Merinos. On paper, the Dohne rams compare well with the Port Stephens breed, however questions remain and they are looking forward to seeing the results as the genes trickle through the flock.

The Robertsons now have enough improved pasture to feed their hoggets throughout the winter, so any future crops will in all likelihood be directed at fattening stock destined for the Sand Bay Abattoir.

Having leased Stoney Ridge farm for a few years, they then went into cattle farming for a few more years after that. Due to these side-tracks they feel that they are a bit behind with where they would ideally like to be with Port Stephens.

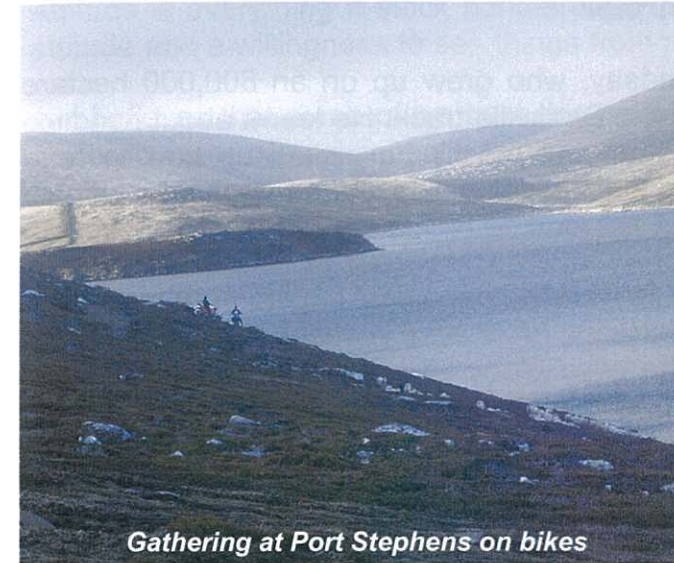


Ram hoggets

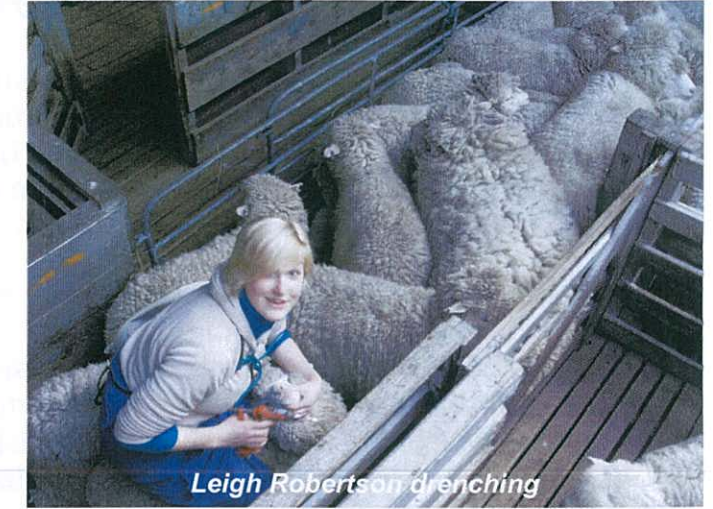


Ram hoggets

FARM IN PROFILE: PORT STEPHENS



Gathering at Port Stephens on bikes



Leigh Robertson drenching

Reduction of sheep losses

One of their primary aims is to try and make some sense of, and come to grips with, their sheep losses. They can have a loss of up to 1,000 animals a year. To try and cut down on these losses they have tried wiggling, ditching, drenching, crops and rotational grazing and are making significant reductions in the numbers lost over recent years.

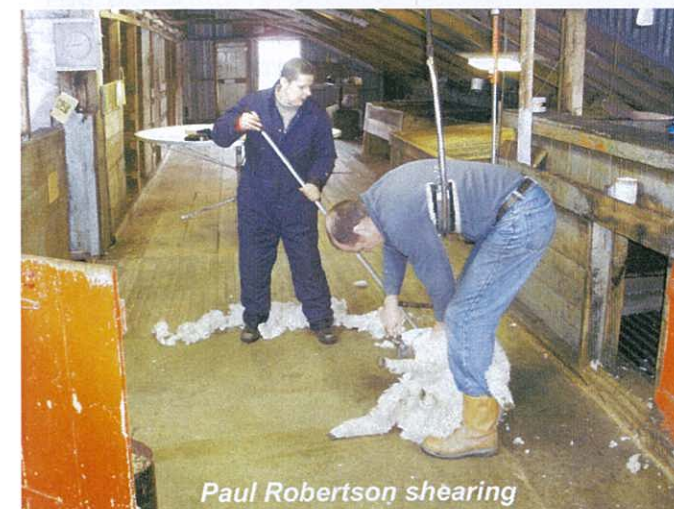
The Robertsons believe that they have made some small steps forwards however they seem to have found themselves at another crossroad; after the erection of 90km of sub-division fencing, they feel that greater returns are needed to be demonstrated to pursue this path any further.

Outside of agriculture, The Robertsons use what were the Cadet's Quarters for self-catering and Diane does her felting (which rather ironically makes her black flock the most valuable animals on the farm!).

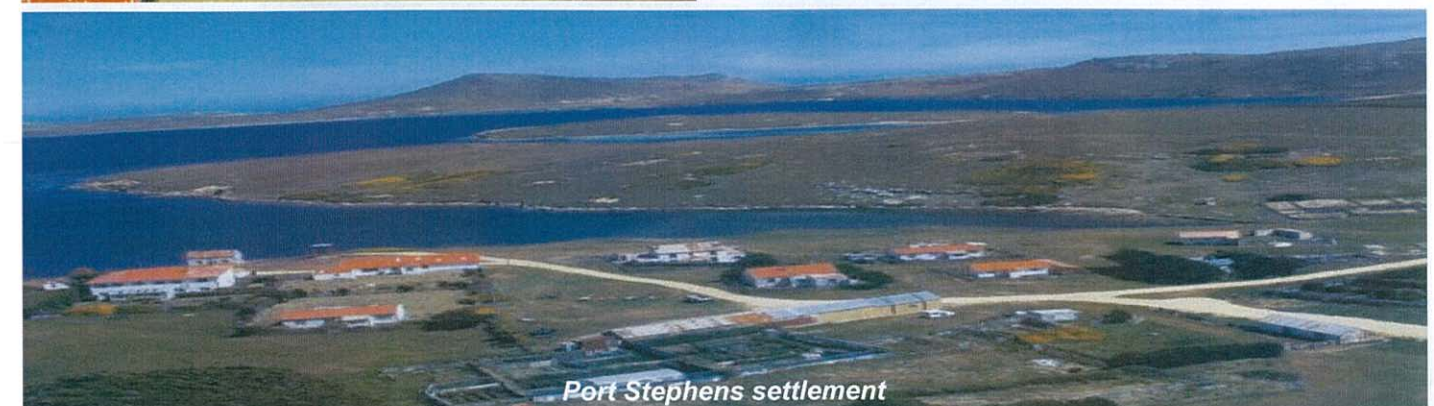
Looking Forwards

The Robertsons believe that wool will continue to be the main driver for the farm. They will be running wethers for the foreseeable future and should they have any success with lambing percentages, death rates, nutrition and all those age-old chestnuts, they will look at trying to produce new season lamb.

In terms of the breeds which they will be running, they have decided that they will stick with what they already have and just concentrate on trying to nail nutrition. Whilst they still remain optimistic about agriculture, the realities of living in camp are becoming increasingly challenging.



Paul Robertson shearing



Port Stephens settlement

ATTITUDE IS EVERYTHING WHEN HANDLING STOCK QUIETLY

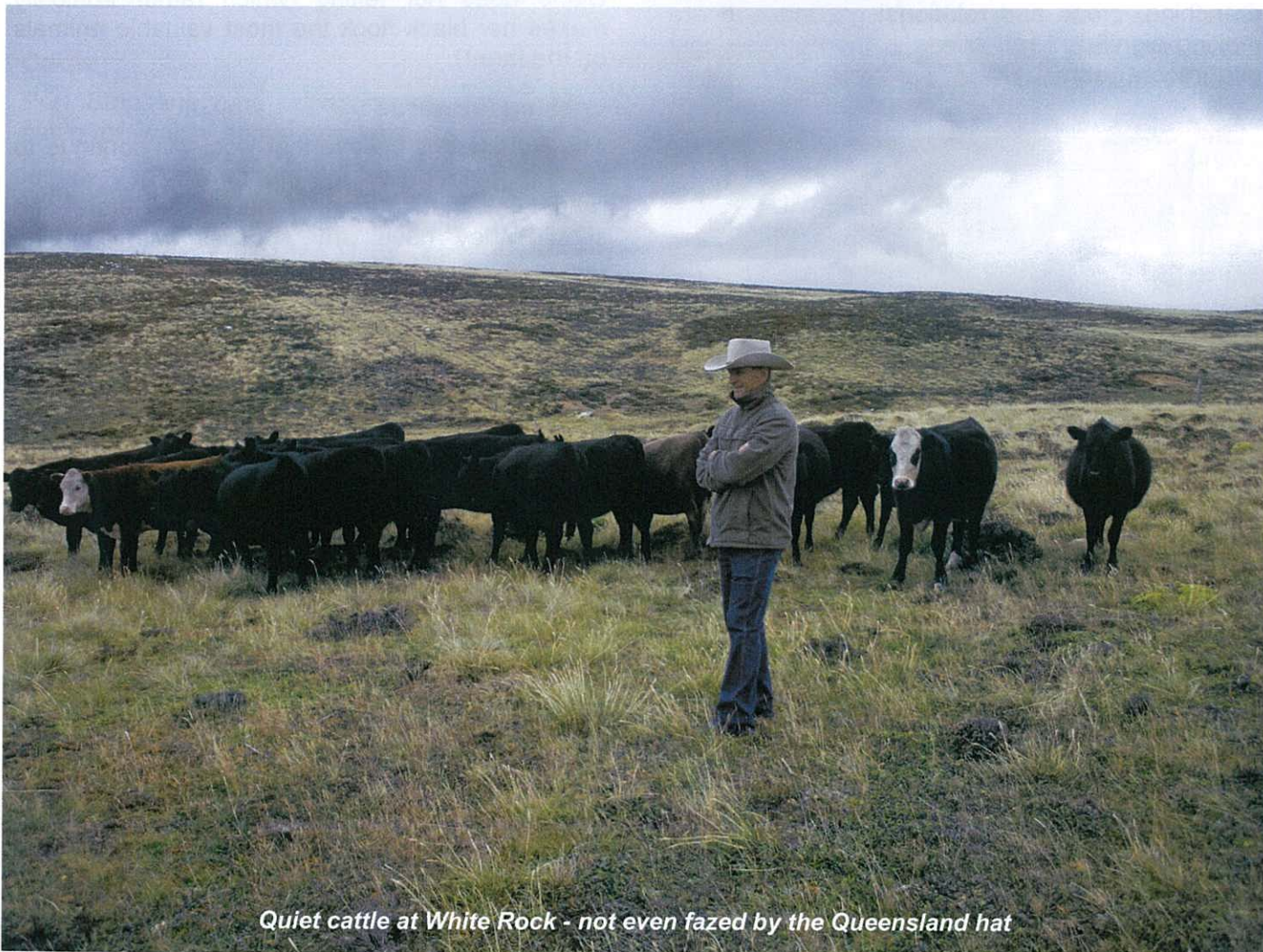
By Mac McArthur

Recently I was reading about a cattleman, Jim Lindsay, who grew up on an 800,000 hectare property in North West Queensland, near the top of the Birdsville track. He learnt about handling stock quietly and without stress, partly from his father but mostly he picked up how to read animals, discipline and have patience with them from the Aboriginal stockmen mentors he worked with.

Flight Zone Psychology

Jim maintains stock handlers need to understand the psychology of their livestock if they are to work them successfully. One of the most important principles is understanding about an animal's flight zone - which he describes as 'an invisible bubble' around each animal which if it is penetrated by a person or a dog will either cause the mob to flee or get it moving calmly in the right direction.

An animal will get nervous or move away if you get inside its flight zone. Cattle and sheep see people and dogs as predators. A predator has eyes in the front of its head and prey have eyes at the side. To get stock to move sometimes we need to get inside their flight zone and to calm them down and not make the animal nervous get outside the zone.



Quiet cattle at White Rock - not even fazed by the Queensland hat

Attitude is Everything

Attitude is everything if stock handlers want a calm, efficient gather - all it takes is a change of attitude and a willingness to see things from an animal's viewpoint.

Jim believes that some of his best tips have come from studying working dogs as they have the ability to work out an animal's flight zone. Good dogs, instead of what is the traditional way of putting pressure on stock, often take the pressure off and let the mob string out in the right direction. This eases the stress on both the gatherers and the stock.

If you are from the old fashioned school that says you must always push the cattle or sheep along from behind, Jim Lindsay says in no uncertain terms, it's time to change your ways. He says that since animals can't see behind them, if you push them from behind they will flip around to face their predator.

This is logical when you think about it and I recall at home we shifted quite large mobs of sheep from paddock to paddock with just a heading dog. You walked or rode in front of the mob with the heading dog behind the mob and at gates you opened them, walked through and the heading dog moved the mob quietly into the next paddock.

Low Stress Stock Handling

Low stress stock handling means happier livestock and happier handlers but there are big financial gains too. Unstressed animals lose less weight, have less bruising and better quality meat than stressed animals. With weaner cattle that have been quietened through this method, substantiated reports indicate they have gained up to \$75 / head in a month.

Weaning for Lifetime Quietness

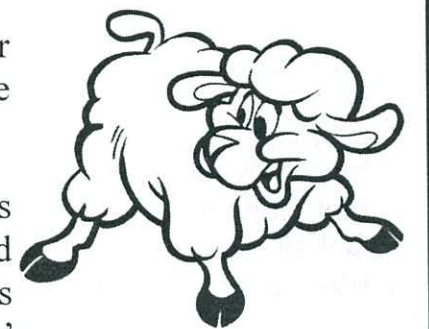
The advantages of weaning calves and feeding them supplements, and walking amongst them for 3 days so they are quiet and used to people on foot means, that if you do it properly they will be quiet and easy to handle throughout their lifetime. At White Rock on the West, Rodney and Carole Lee wean their calves, feed and over 3 days get them used to people in the cattle yards. They then go onto the re-seeds where they call them onto some hay. For that small investment of time and a small quantity of hay these cattle are quiet for their lifetime, can be gathered by calling them and they are calm when they go to FIMCo so there is no dark cutting or tough beef. There is also a lot less stress on them and the people gathering and working them in the yards or transporting them by ferry or truck.

If you are interested in learning more about low stress stock handling check out www.lss.net.au or www.abc.net.au/landline/stories/s251584.htm

Notice from the Rural Business Association

The RBA is now seeking new members for 2009/2010 - for further details please call SeAled Pr Ltd on 22432, mobile 52201 or e-mail sealedpr@horizon.co.fk.

Membership of the RBA offers a variety of advantages such as competitive sheep's back insurance, weekly e-mailed information, lobbying on related issues, obtaining business information at member's request and entry into all Farmers' Week sessions.



COBALT DEFICIENCY

By Zoë Luxton

Introduction:

This is the first in a series of articles about dietary trace-element and macro-element deficiencies. They will focus mainly on sheep as a continuation of the Department of Agriculture's "Wild and Woolly" theme that we focussed on during Farmers' Week. This was our theme as it is the international Food and Agriculture Organisation's 'Year of the Natural Fibre'.

We begin the series looking at Cobalt.

Clinical information:

Cobalt is an essential component of vitamin B12. Vitamin B12 is also known as cobalamin. Soils, pastures and crops contain cobalt but not vitamin B12 thus ruminants rely on the microbes in their rumen to incorporate cobalt into the vitamin B12 complex. A cobalt deficiency is actually a vitamin B12 deficiency as the deprivation of cobalt means not enough vitamin B12 can be synthesised in the rumen. Vitamin B12 is water soluble and poorly stored in the liver so a continual supply is needed to be synthesised, therefore a continual supply of cobalt is needed.

Vitamin B12 is essential as it is involved in the formation of two main co-enzymes in the body:

1) Methylcobalamin – which is needed for the synthesis of other chemicals and amino acids such as methane, acetate and methionine. Methionine is important for wool growth. So, a shortage of cobalt means a shortage of methionine and less wool being produced. Horses, deer, goats and cattle are all less vulnerable to the effects of low cobalt than are sheep. The vulnerability of sheep may be because of their requirement of methionine for wool growth.

2) Adenosylcobalamin – which influences energy metabolism by facilitating the formation of glucose in the liver. So a shortage of cobalt effectively means reduced energy being available to the animal for growth, wool production, grazing etc.

The clinical signs of cobalt deficiency can include:

- A reduction in appetite thus failure of growth and/or weight loss
- Vague unthriftiness
- Reduced fertility and resistance to disease
- Fatty liver seen on post mortem examination

If the deficiency is not severe only young animals are particularly affected. The clinical signs are similar to other common instances such as gross starvation, internal parasitism or a different trace element deficiency. It is important to remember that "poor doers" are highly unlikely to be suffering from just cobalt deficiency and the whole management and clinical picture must be considered.

To diagnose cobalt deficiency you can measure blood serum and/or liver cobalt or vitamin B12. Or you can supplement your mob with cobalt and measure their production parameters such as survivability, wool growth, body weight, lambing success and so on to see if they are improved having been supplemented. This is the less specific method and again, you must bear in mind that many other factors can affect these parameters.

Cobalt can be supplemented in a variety of ways. Longer acting supplements such as rumen boluses or mineral licks are likely to be more reliable than short acting drenches or injections.

The sheep most likely to benefit from cobalt supplementation are lambs/hoggets and ewes in late pregnancy to prevent loss of appetite leading to metabolic problems related to pregnancy such as

twin lamb disease or hypocalcaemia.

What investigations have been done in the Falklands regarding Cobalt?

Steve Whitley (1979-83) and Pullen (1987) postulated that cobalt, selenium and copper were nutrients that may limit sheep health and productivity in the Islands and of these only cobalt supplementation proved constantly efficacious when given to sheep. Past trials have shown varying results. In the late 1940s and 50s a variety of trials involving copper and cobalt were set up by farm managers at Fox Bay and Port Stephens and it was recorded to be apparent that the cobalt supplementation produced the greatest improvement in young sheep survival. Work at Port Stephens in 1977-79 measured the effects of administering cobalt bullets to maiden ewes prior to their first lambing. Their success at rearing lambs over the next two seasons and their wool production was monitored. All ewes, the control group and the treatment group had already been given cobalt bullets as lambs and there was no apparent benefit in terms of lambing, wool production or survival, having had the 2nd bullet administered the next year. Similar results were obtained from Salvador in 1977/78 when breeding ewes were given cobalt and selenium supplements and there was no effect (in terms of measured parameters) seen. In 1978 wethers at Port Stephens and Fox Bay West were supplemented with cobalt and the results were said to have been that better wool production and survival rates were seen at Fox Bay but not at Port Stephens. In 1981 some work was carried out measuring vitamin B12 levels. Vitamin B12 was measured as low in 75% of lambs sampled at weaning and after administration of a Cobalt bullet only 5% of them as hogs were deficient.

Cobalt in soils and pastures:

All common pastures contain cobalt in amounts that vary with plant species and soil conditions. Legumes are usually richer in cobalt than grasses under the same conditions but the advantage of legumes will be lost if the soil itself is very deficient. Soils are generally richer in cobalt than the overlying pasture. Thus, ingesting some soil can increase cobalt intake especially in spring and autumn. Disorders occur more on long pasture as less soil is ingested. Young plants have greater uptake of cobalt than mature plants but regardless of age cobalt uptake is decreased in dry soils and when the soil has a high organic matter content which 'locks away' elements and reduces the availability of cobalt. Water-logging, in contrast, increases cobalt availability to herbage. Cobalt concentrations in pasture grasses decrease as the soil gets more acidic, but heavy liming also decreases plant cobalt uptake. High levels of soil manganese can depress cobalt uptake by pasture. There is a strong correlation between soil iron and soil cobalt level. Acid granitic and peaty soils are usually very low in cobalt (0.2-1ppm) as opposed to mineral soils that range from 1-60ppm.

If pasture cobalt is less than 0.05-0.08ppm for some months, then sheep are considered to be at risk of deprivation.

What do we know about soils and plants in the Falklands?

Soils in the Falkland Islands are very acidic, generally ranging from pH 4.1 to 5.0. FI soils also have high levels of organic matter on the surface due to cool temperatures and low worm populations, (Miller 2000). Both these factors lower availability of cobalt to plants. Organic matter content is highest in deep peaty soils and lowest in shallower soils in coastal regions.

In his 1983 end of contract report Whitley stated 'soil and pasture samples showed low or very low cobalt levels' this was gleaned from his own work and from his reading of Davies' 1971 work.

Davies (1971) recorded a mean value of 0.32ppm cobalt for soil samples. Whitley measured a mean cobalt level of 5ppm. However in Whitley's survey the lower cut off level for the soil tests was 2ppm and 20% of his samples were at 2ppm or below. These samples could actually have been much lower than 2ppm but as they were recorded as 2ppm this will falsely elevate the mean level calculated.

The concentration of cobalt in plants normally ranges from 0.1-0.6ppm.

Davies et al in 1971 recorded diddle dee and christmas bush as having slightly higher levels of Cobalt, 0.67ppm and 0.74ppm respectively. Pig vine is also a rich source. It is therefore important to allow sheep access to some native pasture if grazing on crops or re-seeds. Inclusion of shrub species in the diet probably raises the cobalt intake from the critical level. Whitley measured the mean white grass level of cobalt to be 0.06ppm.

Animal Samples:

Normal liver levels of cobalt are reported to be between 0.2-0.3ppm which falls to <0.08 in deficiency. Whitley took samples of liver, heart, kidney, spleen, whole blood and serum to measure cobalt levels in. Unfortunately several samples were lost. But, the results of the liver samples showed that levels of cobalt ranged from 0.03-0.88ppm. This highlights the fact that different ages of sheep in different geological locations, eating different food will have varying cobalt levels.

The most important thing to remember is that yes, cobalt deficiency can cause ill thrift and reduced production, BUT it is exacerbated and exaggerated by sheep that have a more worrying gross food deficiency, high parasite burdens or concurrent disease. Look at the whole picture when managing your flock.



ALLOCATING THE 2009/10 FIG ENVIRONMENTAL STUDIES BUDGET

From the Environmental Planning Department

Annually, the Falkland Islands Government provides funding for environmental research, awareness raising and conservation and management activities. The Environmental Planning Department, with the advice of the Environmental Committee, is responsible for allocating the 'Environmental Studies Budget' (ESB) funds to owners and managers of land, non governmental organisations and international scientists that conduct research and conservation activities in the Falkland Islands.

The ESB has a formal application and decision making process. The first of two funding rounds will be held in September and the second will be held around February 2010.

Priority areas

Projects eligible for ESB funding must assist in the management of the biodiversity of the Falkland Islands. Priority will be given to initiatives addressing the key three themes of the draft 'Falkland Islands Biodiversity Strategy', which are environmental research, on-ground action and education.

The Environmental Committee has prioritised the current biodiversity needs of the Falkland Islands and projects that address these are more likely to gain ESB funds.

Application process

There is a formal application form, which can be obtained from the Environmental Planning Department. Where possible, some level of co-funding or in-kind costs (e.g. labour, equipment) is desirable.

Deadline for applications for the first funding round is **Monday 14th September 2009**. Applicants are encouraged to discuss proposed projects with the EPD Environmental Officer prior to submission and he can also help draft your application.

Please contact the EPD to obtain an information pack, including the application form (28480, fwallace-nanig.planning@taxation.gov.fk).

AUSTRALIANS RENEGE ON MULESING DECISION. WILL THIS AFFECT THE FALKLAND ISLANDS?

By Ian Campbell

I note that in a carefully worded statement by Australian Wool Innovation (the overarching authority on wool in Australia) is thinking of renegeing on its agreement to phase out mulesing by the end of next year.

Mulesing is the surgical removal of skin around the breech area of sheep to reduce flystrike. The procedure is scientifically endorsed as very effective; it greatly reduces chemical use, labour inputs, reduces breech stain in wool and makes shearing easier and safer. Powerful animal rights campaigners however had negotiated for it to be banned by 2010 on welfare grounds. Effective economic alternatives have not been developed and somewhat predictably to those who follow wool politics, the recent announcement was made.

The decision is a pragmatic one based on keeping the dreaded blowfly at bay but it can have serious marketing implications if buyers follow up their threats to boycott wool from mulesed sheep.

Falkland Island sheep are not mulesed. So for farmers here is this decision a good or a bad one? I think it is a two edged sword.

It could be good for Falkland Island sheep farmers.

A number of highly influential wool retailers have categorically said they will not sell wool products manufactured from mulesed sheep. It is fairly certain that market access and prices for non mulesed wool will therefore be better than for mulesed wool once the deadline has passed.

The Australian woolgrowers who do not mules are busy setting up a new marketing systems based upon legal declarations N.M.M. (Non mulesed Merino) is one I know of. The Falkland Islands can also offer non mulesed wool and this is something we need to make the buyers very aware of; hoping that we too can cash in on any premiums going around.

But there might be a catch...

It may be that buyers just go right off wool as it will be too contentious. There are no animals used in the making of cotton, nylon or polar fleece products and hence no cuddly lamb ethical dilemmas (the use of non renewable resources is another issue though). A number of years ago the very same activists put the world fashion industry right off fur. Intensively farmed mink or feral, lamb killing foxes culled for that reason, it did not matter - any fur was made to be just politically incorrect.

In 2004 Abercrombie and Fitch black banned Australian wool (did they ever buy any before this?) and this is what brokered the phase out agreement. The marketing pull of other similarly powerful companies (Marks and Spencer, Adidas, Hugo Boss, Modiano) is also being brought into play so the world wool market is going to undergo some huge pressures from some very serious players. There will definitely be losers but will there be winners? Only time will tell.

Moreover as farming practices are put very openly into the public arena for discussion, will all the other wool industry practices be accepted as fair enough or will other issues emerge, some of which may be closer to home. I endorse Steve Pointing's comments last edition.

As the year goes on I believe the enormity of this decision will be become evident in world wool demand and pricing. It will be nothing if not interesting times ahead.

Circular to shepherds September 1st 1932

Provided by Ailsa Heathman

GENERAL. When gathering or driving, sheep must always be given plenty of time, use your dogs as little as possible, the more you use your dogs, the more tired you make the sheep and the dogs as well.

Shepherds are in charge of any skins that are hung on fences which they are looking after, whether they hung the skins there themselves or not, and skins must not be left on fences longer than can be avoided.

All shepherds must make it their business to be able to tell the age of sheep by their ear marks, and also to know what is the cull age; anyone wishing to do so can get a list of the age marks from M. McCarthy.

The rules about dogs are that no shepherd is to have more than four dogs including pups, and nobody is to take more than 2 dogs when shepherding his ground or when doing any other kind of work with stock.

Ewe men when shepherding during quarantine must not take more than one dog with them.

From the beginning of quarantine till shearing shepherds are not allowed in the settlement except Saturdays, ewe shepherds are not allowed in at all unless they are bringing in wool or skins.

No camp is to be burnt without permission and on no occasion after Oct 1st. **SHEARING.** When the work, gathering or driving, is a full days job, the gang must leave the house no later than 4.00am.

All shepherds, when gathering or driving rough sheep, must carry a pair of shears and melitos, any sheep that will not travel, whether wet or dry, must be shorn in the camp and the wool brought to the settlement and handed over to the wool classer in the shed. If a man gets more wool than he can carry, he must leave what he cannot carry in a conspicuous and easily explained position so that the man of the flock can collect it afterwards.

No set time will be given for gathering

or driving and the sheep must always be given plenty of time. The time taken must be kept by the man in charge and if it is less than 9 hours the days work must be made up to that time in the wool shed unless orders are given to the contrary; but shepherds must understand that in cases of necessity they are liable to have to work more than 9 hours a day.

DIPPING. When gathering or driving any sheep that will not travel that is a scrog or is of cull age must be killed and skinned, and the skin if not taken to a house must be hung on a fence wool up; sheep are not to be opened up and left in the camp.

LAMB MARKING. Use dogs as little as possible both to avoid tiring sheep and to avoid mismothering, the main object when gathering at lamb marking is to get the sheep to the pens without getting the lambs mismothered. **THERE IS NO HURRY,** there is only one pen to mark a day, give the sheep any amount of time. When the sheep are getting close to the pen, do not get too close to them and when a corner of the flock need turning in, when possible go round them yourself and do not send a dog round them. Nobody must go among the sheep till the nets are right round them unless orders to the contrary. If a cut of lambs break and get right away from the main flock so that it means a lot of driving and dog work to get them back, let them go, but every effort must be made to turn them into the flock before they do get too far.

DRIVING. When more than one man is driving a flock of sheep, one man must always be in front to steady the fore end and to clear the track. Sheep must always be given plenty of room to allow them to feed when they are travelling and must not be kept closer together than is necessary to keep them under control.

Re the rule about dogs, no shepherd may have more than 3 working dogs, a man may only have four dogs when one or more of them is a pup.

Shearing dates

Shearing is permitted from 15th October to 15th of March using standard combs
Cover combs may be used from 15th September until the 30th April

The only shearing permitted outside these periods will be of animals which are slaughtered off the shears. The slaughter should take place within 2 hours if the animals are not penned in the building and in any case not later than 24 hours post shearing.

Recipe Spot - snacks from sainsburys.co.uk

Banana & Choc Chip Muffins

250g self raising flour 1 teaspoon baking powder
50g oatbran 50g chocolate drops
2 medium size eggs 2 bananas, mashed
75g butter, melted 150ml semi skimmed milk

Method

Preheat the oven to 200°C, 400°F, gas mark 6. Lightly oil 10-12 muffin tins, or use muffin cases. Sieve the flour and baking powder together into a large bowl, then add the oatbran and chocolate drops, mix well. In a separate bowl mix together the eggs, bananas, milk and melted butter then pour onto the dry ingredients and stir together with a wooden spoon. Spoon the mixture into the muffin tins or cases, bake in the oven for 15-20 minutes.

Giant Chocolate Chip Cookies

125g butter or margarine 50g soft brown sugar
1 medium egg, beaten 150g self raising flour
50g chopped almonds 175g plain chocolate, grated

Method

Preheat the oven to 180°C, 350°F, gas mark 4. Beat the fat & sugar together until light & fluffy. Add the egg & beat thoroughly. Mix in the flour, chocolate & almonds. Place 12 spoonfuls of the mixture well apart on greased baking sheets & spread each out to a 10cm circle with a damp fork. Bake in the oven for 15 minutes, until golden. Leave on the baking sheets for 2 minutes, then transfer to a wire rack to cool.

Last Month's Solutions

A I S A N A H T U L A B B P H J A Z E I
V E T E R I N A R Y D E P A R T M E N T
T R O T I M O D S B W X K G Z I A Q I G
H R D C W J K T Y Q A L V J S B N H Z T
X E I R B O H L R G R Y S C E U A X A L
P P A G A P P O I N T M E N T R E B I G
H R I L E P C J N G I L I X Z C S O D T
A K T H T N E R G S L D C J U S T A E Y
N R P D C H E S E A O B P A T I I H T M S
B O E O L O C Y N I S Q N J F B E I I P
R E I T I M R E P T R O P M I I S N R O
S E Z T D I O C R W I C N G E H I S T H
C M T C A U L I I T Z O S F L I A P Y B
L Q Y U S T M O A M I N A L O S Q E G G
B Q K M E A L N H T F F A Z O B K C L Y
U L Q T D N I U A K Q C I G D O V T C Y
P Q C Y V C Q R S O K E Z C Q F S I M Z
V A L N C G E S Y N U L O X A Z C O D G
Q H F A E P Y P B R O J S L M T I W A L
E P V G O N E E D E C U E O S E S Q A

5	6	2	8	1	7	4	3	9
3	7	9	4	5	2	6	8	1
8	1	4	6	9	3	2	7	5
-----+-----+-----								
2	4	5	3	6	9	8	1	7
1	3	6	2	7	8	5	9	4
9	8	7	5	4	1	3	2	6
-----+-----+-----								
7	5	8	9	3	4	1	6	2
4	9	3	1	2	6	7	5	8
6	2	1	7	8	5	9	4	3

Brainteaser

120 miles. On the first day I travelled 60 miles, leaving 60 miles. On day two I travelled 20 miles, leaving 40 miles On day three I travelled 30 miles, leaving 10 miles. Yesterday I travelled 5 miles, leaving 5 miles.

If you would like to see a particular type of puzzle in the Wool Press, then please let us know!

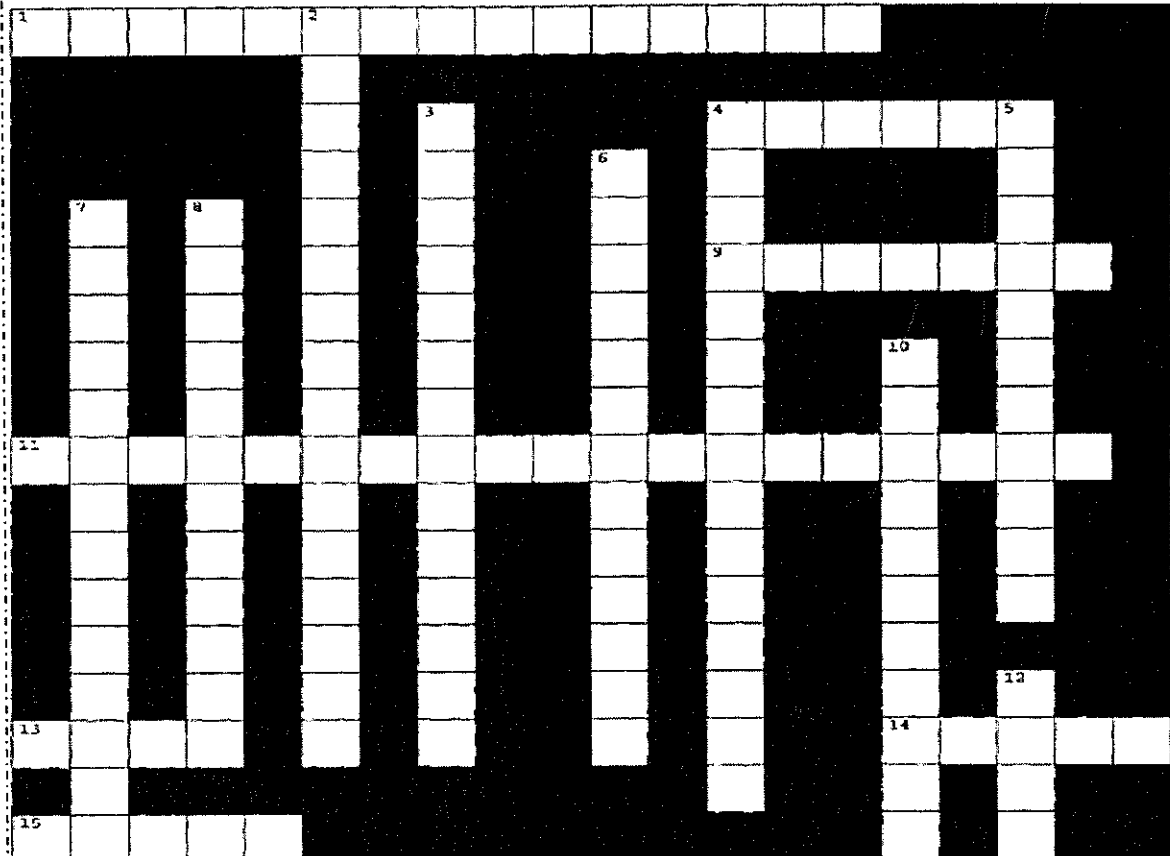
For sale from Bold Cove farm














- 1 Wolvo round baler (small bales)
- 1 Wolvo bale wrapper
- Selection of spares for the above
- Large quantity silage wrapping material

Offers around £6,500 or for more info contact Riki Evans on 42136 or email goodevans@horizon.co.fk

PUZZLE PAGE

Word Search with a twist



-  11
-  13
-  14
-  15
- Down:**
-  2
-  3
-  4
-  5
-  6
-  7
-  8
-  10
-  12




Sudoku

Each Sudoku has a unique solution that can be reached logically without guessing. Enter digits from 1 to 9 into the blank spaces. Every row must contain one of each digit. So must every column, as must every 3x3 square.

7			8		5			2
				2				
		4	1	9	3	5		
6		7				9		5
	2	5				7	1	
9		3				2		6
		6	4	8	7	3		
				5				
3			9		6			7

Here is your average word search, but instead of clues you have pictures. All you have to do is guess what each picture means. All the pictures are all ones that you should recognise off your computers.

Across:

-  1
-  4
-  9

DingBat Brain Games

Flex your brain, free your mind and think laterally

GEG

...HIJKLMNO...

Hint: Describing out loud what you see may give you the clue you need!!

Brainteaser

What is represented by this Brain Bat?
STPEPETSPEETS

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Telephone +500 27355

Fax +500 27352

sferguson@doa.gov.fk

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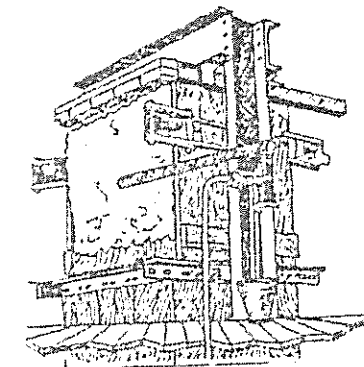
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Plus all the usual features and more!



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EDITORIAL

Spring has truly arrived with plenty of September sunshine and a lot of wind to accompany it. Here's my contribution of a bit of hot air! The first very early lambs are on the ground and some of the orphan ones have already found their way to the vet clinic for a bit of a helping hand – often as a result of the doting foster mum being a bit too generous with the replacement milk.

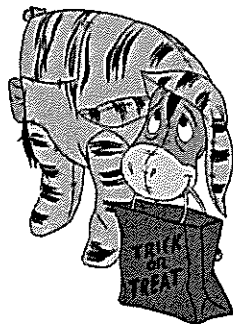
What can you find in this month's Wool Press? Please read Mac's opening article on the desirability of everyone involved in the Agricultural industry (the DoA, farmers, FIMCo, the RBA, FIDC etc) to pull together – criticise by all means but please let it be constructive rather than destructive criticism. I really like Mac's comments about when you are pointing a finger at someone you are usually pointing 3 fingers back at yourself – a good point for anyone to remember. Ian Campbell has written an article on lamb mortality – not the first time this subject has been written about nor, I suspect, will it be the last. However, it is still a crucial issue in the Falkland Islands and until lamb mortality can be reduced (or lamb survivability increased) many of the desired objectives for increasing the productivity of Falkland Islands farms will continue to fall short of their potential. Are you a risk taker or a risk avoider? According to Tony Mills, most primary producers tend to be risk-averse but you can find out more about risk and how to manage it by reading his interesting article on the subject. The Vets have been busy with their pens this month and you can find articles on such diverse topics as the national cattle identification scheme (ZL), lice in cattle (SC) and things you ought to know about E. Coli O157 (SP). I think they all merit a read.

Andy Pollard continues with another article based on material he presented during Farmers' Week – this time on managed intensive grazing, and Ian Campbell delves further into what constitutes the most profitable sheep breed. This month's farm in profile is Mount Kent Farm – Dan and Leon certainly have some very fine woolled sheep there. On page 9 you can find information on 2 open days so pencil those dates into your diary now and some of you may be willing to employ a young person on your farm as a trainee – if so, Ian Campbell would be pleased to hear from you at the DoA.

And finally, last but by no means least, we are now a part of a newly formed Department – the Department of Natural Resources which incorporates the Fisheries Department. Our new Director, John Barton, will take on the mantle of Agriculture as well as Fisheries from the 1st October 2009. Most of you will already be familiar with John from his previous role but you can find out a bit more about him and how he thinks the new Department might develop in his short biography on page 12. Let's hope he can bring some of the success enjoyed at Fisheries into the Agricultural sector.

Here's to a good lambing season with some kind weather thrown in.

Steve Pointing
Senior Veterinary Officer



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FALKLAND ISLAND FARMERS FENDING OFF OWN GOALS

By Mac McArthur

Farewell to Phyl

Last Friday evening, Department of Agriculture staff and their partners farewelled Phyl Rendell. We thanked her for the outstanding job she has done over the past six years to influence the diversification of agriculture from a basically wool only industry to a lamb, mutton, beef and partially organic and finer higher value wool industry. In Phyl's time as Director the agricultural sector in the Falklands has shown significant economic growth. Those farmers who have chosen to adopt new technologies, management methods and view their farm enterprises as businesses, not just a way of life have reaped the benefits of working with DoA staff to significantly improve farm profitability and the value of their farm assets.

National Diseases

New Zealand, where I grew up, has a National 'disease' called Rugby Union. Recently the All Blacks beat the Wannabies (Australia) by a significant 33 to 6 in a Bledisloe Cup match which would have created a bit of tension between the ANZACs. In the short time I have been fortunate enough to work and live in the Falklands I have wondered what the Falkland Island National 'disease' might be. Darts, drinking, dancing, dog trialling, dining, football, horse racing and hospitality all seem to feature. However, I observe in the Falklands, occasionally with a small minority of people finger pointing seems to be the 'disease' of choice.

An old fellow I worked with many years ago pointed out that when you are pointing your index finger you automatically have 3 fingers pointing back at you. A recent issue that involved the DoA highlighted the importance of people not leaping into a frenzy of criticism before they fully understand the issues and the implications of decisions that are going to significantly affect theirs and many other farm, processing and service businesses in Camp and in Stanley in the future.

Reduction in Australian Government Agricultural Funding

As a Beef Extension Officer in Victoria my role

was to assist beef producers to make decisions about the financial implications of producing beef relative to growing potatoes, prime lambs or crops. One of my first jobs was to go out to a potato growing district where some very poor potato farmers had diversified into producing beef and the market price had dropped so much that the cattle they had were almost worthless. It was a tough extension job trying to assist these farmers as many of the cattle had to be shot and buried and potatoes at that time were selling for less than the cost of producing them.

At that time governments in Australia were funding agricultural research and development (R&D) and extension to assist farmers to improve their farm productivity and financial returns. Regional and district government offices had teams of sheep, beef, dairy, potato officers and agronomists etc. Large agricultural research stations with significant teams of research staff abounded and young agricultural and veterinary graduates and diploma holders were offered government scholarships to complete their courses and then be trained as either research or extension staff when they graduated. Many of these people once trained by government took up key roles in the private agricultural sector.

We've come a long way from those halcyon days to now where current Australian governments do not want to know about agriculture and many research stations are being sold and the staff made redundant. The district offices are lucky if they have one totally over-worked, stressed animal health officer to deal with all enquiries and agricultural regulatory and animal welfare issues often working over hundreds of thousands of square kilometres.

This transformation from a well funded and politically strongly supported government agricultural R&D and extension service has deteriorated in a relatively short span of years to be almost non-existent. The majority of Australians are urban based living in cities mostly close to the coast and unlike generations ago have minimal association with farmers and food producers. In fact in a pro-

ject I was involved with in Sydney it was clear significant numbers of young people had no idea that milk came from cows or that cotton grew on a bush - in fact I overheard one teenager whilst pulling a cotton boll apart wondering aloud what sort of sheep it had come from!

Agriculture Sector Working Together

I observe similarly but not as acutely yet, that there is a similar tension between some Stanley based folk and Camp farmers very similar to the Australian city/country tension. If you live in a city, have all the fresh food you require along with entertainment, easy access to sport, schools and medical facilities etc. it is understandable that unless things are well explained and justified those jealousies about government investment to develop and encourage production and profitability in farm businesses can be misconstrued.

The farming sector if it is to avoid the loss of agricultural R&D and extension resources needs to unite and work closely with DoA, FIMCo and FIDC staff and the RBA to ensure a financially strong agricultural and farming sector. The recently formed FIMCo Suppliers Working Group which is a group of farmers, FIMCo, DoA and FIDC staff is working hard to ensure that the required future throughput of lambs, sheep and cattle to FIMCo ensures its future viability and growth as a vital FI business. It will also ensure Stanley folk have high quality, fresh, beef, lamb and mutton



Mac McArthur with Steven Dickson and Ian Jaffray at North Arm.

available throughout the year at very competitive prices relative to that of other countries.

The Beef 20/20 project similarly is aimed at all sectors of the beef industry, farmers, FIMCo, DoA, FIDC staff, beef retailers, restaurants and food service outlets working together, to ensure that the key supply chain and marketing issues are sorted to grow the local and export beef markets. Together we win; divided we fail.

Kicking own goals through negative emails plays into the hands of those who would prefer to see less investment in agricultural production, processing and service industries which not only benefit farmers but Stanley people and the whole Falkland Island economy.

LAMB MORTALITY

By Ian Campbell

What a great loss lamb mortality is. Scanning data shows ewes tend to reliably become pregnant, but lamb marking results show it is more than likely that 30% of lambs born in the Falklands die around birth. Carrying a lamb over winter is a big ask of any ewe, and a lost lamb has already taken a lot out of her. Nobody wins- other than the turkey vulture who gets a meal.

The big question though is can we do anything about it? Does it all depend on luck - being born on a clear still day rather than one blowing a hoolie with horizontal sleet? Reducing lamb mortality can grow our ewe flocks, provide more lambs for FIMCo, and

enable a quicker genetic selection.

Causes of loss

Most lambs die in the few days around lambing. Examining dead lambs and doing post mortems can indicate how a lamb has died.

- Most losses are in the rather large grab bag known as Starvation, Mismothering and Exposure (SME). These lambs are found with no milk in their gut, they have wandered around (you can tell this by their feet) and they have used up their brown fat reserves from around the heart and kidneys.
- Still born lambs died before or during the birth process. They will not have walked or fed, their lungs are not inflated

(depending on when they died) they have full brown fat reserves, and maybe show signs of prolonged birth (swollen heads, neck and spinal bruising etc) and no blood clot in the umbilicus.

- Predation of a live animal will show copious bleeding around tooth or peck marks, whereas a dead animal partially eaten will show little bleeding. If they have a full gut and brown fat deposits you may have a predation problem.
- Trace element problems. Enlarged thyroids indicate iodine deficiency, paralysis or staggery gait might be copper deficiency and white muscle (streaks in the heart etc) could be a selenium problem.

Whilst this form of forensics is quite neat - does it help us to prevent losses? I believe it can.

Starvation, Mismothering, Exposure

The fact that the three components are grouped together is partly because they are hard to differentiate between and partly because they are related. The exposure part of this equation is very high here. Low down shelter in grass bogs, behind rocks or tussocks or on the lee side of hills is actually quite effective though.

Health and nutrition of the ewe pre-lambing will have a dramatic effect on the brown fat levels of the newborn lamb. Brown fat is easily seen around the heart and kidneys, and is a fat that is rapidly utilized when needed, providing valuable energy for the lamb until it can start drinking milk. The more brown fat they have the longer they will live post lambing.

Nutrition of the ewe pre-lambing also has a big impact on her milk production. Not only the typical daily milk production but also importantly in the prevention of mortality - the time to the onset of lactation after lambing. The main health problem is probably worms in the ewes which should be monitored, but sometimes trace elements as well should be considered.

It is possible that some lambs placed in the SME grab bag have received a spinal or brain injury during a prolonged birth and have lost

the instinct to mother up and look for a teat. Speaking of teats if ewes are missing these (due to a shearing mishap) the lambs will also be diagnosed SME: such ewes should be culled or run as dry.

Which lambs are most likely to die

Very small and very large lambs are more likely to die (the small ones by SME the large by birthing difficulty). It is hard to deliberately influence this as there are differing nutritional effects during placental development and foetal growth.

Twins (and triplets more so) are more likely to die not only due to their smaller size but also competition for milk and a divided loyalty from the mother.

Birth coat is something that I have heard many people talk of here. In Australia there has been a lot of birth coat research which is inconclusive as far as survival goes. Energy reserves and rapid milk intake are usually described as more important. It has been shown in Patagonia, however, that lambs with longer, perhaps hairier birth coats have more protection against the elements and so have less cold stress and subsequent mortality.

The question is; does selecting for finer woolled sheep also select for finer birth coats, and the answer is not necessarily. Some fine woolled sheep were born with good birthcoats and some poor birthcoat lambs grow out to be strong woolled sheep.

Lambs born to maiden ewes are more likely to die - they all need to have a first lamb sometime - not much anyone can do about that, except perhaps to mix them in with mature ewes and they might get the mothering and suckling urge by association.

Nutrition of the Ewe

There are a number of effects here. The importance of energy reserves in the lamb and the need for a rapid onset of lactation have been alluded to. Ewes in good nutrition at birth have a far quicker and easier, and as a result more successful, birthing process. They are also likely to produce more milk during lactation. Attention to grazing management of the ewe flock is therefore vital.

Lambing time

A vexed question. Whilst bad weather can happen at any time, lambing later should provide better weather and also marginally better ewe nutrition and hence better survival. It gives less time however for the lambs themselves to grow for either processing or for surviving next season on their own. To some degree they might compensate but choice of lambing time is very much a compromise. Robbing Peter to pay Paul.

Summary

Low lambing percentages in the Falkland Islands are of major concern, because that, along with high hogget death rates, is limiting the size of the flocks, genetic gain and farm profitability. Of course we cannot alter the weather, and there is limited ability to manage timing. The ability to influence lamb resilience, through improved grazing management, and ensuring the sound health status of the ewe, should never be underestimated.

RISK AND ITS' MANAGEMENT

By Tony Mills

I thought I would touch on the subject of risk as it came up a number of times during Farmers' Week, mainly in relation to production risk and marketing risk.

Primary production, like life, is encumbered with many risks. In general we cannot escape risk nor do we want to as there is often an appeal and excitement in taking on a task that may seem risky. Risk is also two-sided and this is often described by the phrase of 'risk and reward'. It is often stated that the higher the potential reward, the greater the inherent risk. While this may be the case in general, there are exceptions especially where someone has knowledge or technical skill superior to that of their peers or the market as a whole. For them the undertaking is not particularly risky even though the majority of people think it is. I'm sure this kind of situation provides the stimulus for many robust discussions around the table, bar or campfire!

It is well known that most farming decisions have an upside and downside component and because we are dealing with a biological system where subtle changes are commonplace it does make it difficult to always make the best decision. The good risk manager then is one who constantly makes best bet decisions so over the long haul they have a good batting average but it is by no means perfect.

People also have different attitudes to risk and are therefore characterised by this attitude. The two main groups are risk takers or risk avoiders. Primary producers are often described as risk-averse, that is they look for pathways that offer more certainty, even if they remove a lot of opportunity. Risk takers on the other hand take pathways that focus on maximising opportunities, even if they expose themselves to risk. It could be said that the tag of risk-averse is a little ironic given that wool selling is usually done once a year, selling of livestock is often done on the open market and producers work in a business that has a number of external factors that are often beyond their control. I would suggest that because of this there is a fair amount of risk exposure!

Farm risk can be covered under five main headings:

1. Financial risk
2. Enterprise or production risk
3. Personal and staff risk
4. Marketing risk
5. Natural resource risk

Each of these areas is dependent on one or two other areas and should not be seen as stand alone. There are also numerous actions that can be taken to manage these areas of risk. Some examples would be growing crops, managing grazing, maintaining sufficient

levels of equity, insurance or diversifying income streams.

The main two areas that were generally touched on at Farmers' Week were production risk and marketing risk. More specifically with marketing risk it was the price received for cattle and sheep.

It was the discussion around pricing and the apparent attitude to the information provided that I was really interested in. The price received is always a talking point in any country given the constant cost-price squeeze that is inherent in agriculture. This discussion highlighted for me a key tool that producers in the Falkland Islands have at their disposal and that is price risk management in the form of a forward pricing schedule with transparent market specifications. Forward pricing in many other countries is usually done with individually negotiated contracts, or financial tools known as futures. Generally these methods require special skills or at least the development of the necessary skills to use these to their best advantage. Having a forward price schedule removes this need while still providing an efficient planning tool. Wouldn't this be handy for wool selling!

In the UK, New Zealand and Australia the markets are very mature with well developed trading systems for meat and wool and constant market intelligence especially related to product prices. However unlike the Falkland Islands most producers still utilise the open market when it comes to selling their produce. The key to achieving a good sale is then down to understanding the basic supply and demand conditions and intuition. An example of this happened to the producer I used to work for in Western Queensland who had

chosen to sell lambs on the open market in July. Market intelligence suggested that the price he could expect for his lambs (Merino x, 6 mo, dwt 22-23kg, FS 2-3) was \$AUD90 plus per head. He was aware that large numbers were being turned off because of favourable prices and the potential for a continuing dry season. Because of this rates may well decrease as plentiful supply was not an issue. With this knowledge he listed them on a system called Auctionplus which allows producers to participate in a live open market auction however the animals have been assessed on-farm and remain on-farm until a sale has been achieved. He set a reserve of \$AUD75 and then watched the auction proceed. The end result was final bids close to the reserve which meant some negotiation to receive the reserve price which was the eventual outcome.

Obviously there was a significant price drop but the producer was still happy to complete the sale. This decision was based on his cost of production, the realisation that the market price was on a sustained downwards trend and his pasture situation was not likely to improve.

The advantage Falkland Island producers have at present is a price schedule for both sheep and cattle in place for 12 months (note that the exports season prices for 2010 will be confirmed closer to the season opening) with clear animal specifications. This removes a great deal of risk out of the selling decision and allows you to focus on the production aspects which can maximise the income received from your sheep, lamb and cattle turnover.

Indeed an enviable position.



Dates for the Diary



- 31st October Falkland Islands Meat Company Open Day
From 10am to 2pm at Sand Bay Abattoir, for more info call 27013
- 4th November Dog Dosing (Droncit)
Please remember to contact the veterinary service on telephone no 27366, fax no 27352 or email imports@doa.gov.fk and advise when your dogs have been dosed
- 21st November Saladero Open Day



NOTICE FROM STANLEY SPORTS ASSOCIATION

Regretfully, Adrian Cawdery the equine podiatrist due to visit the Islands in November has had to cancel his visit this year due to personal reasons.



THE NATIONAL CATTLE IDENTIFICATION SCHEME – AN UPDATE

By Zoë Luxton

As you are probably all aware, the need for a National Cattle Identification and Tracing Scheme is undeniable if we want to protect our local public health, enter into an export market for beef and protect our own animal biosecurity. Below is a table that should look

familiar to you. It is outlining some good advice as to tagging your herd in preparation for when the scheme is mandatory. Due to some technical teething problems the cattle register and movement database has not 'gone live' yet but will do in January 2010. Please ring with any queries.

DATE	CALVES BORN	CATTLE ON THE GROUND	REGISTRATION
After 1 st January 2010	<p>All calves born after this date must be:</p> <ul style="list-style-type: none"> • Double tagged with approved tags* • Tagged with a small tamper proof tag in one ear and a large tamper proof reader tag in the other ear. The tags must both bear the farm code and a number. Ideally both tags will bear the same number but this is not essential as long as accurate recordings of tag numbers are made in farm records. # These numbers should only be used <u>once</u> i.e. not repeated in another cow. All numbers and station marks used must be recorded in the <i>farm register</i>. • Double tagged by the age of 6m (or before leaving the farm whichever comes first) • Unfortunately until the legislation is amended (which can take a little time!) all livestock must have a station mark also. When this tagging legislation comes to fruition the station mark <u>may</u> become obsolete. 	<p>If remaining on farm: Farmers current tagging practice is allowed but consider starting to number tag (if not double tagging) your adult cattle if you get the chance. Record numbers in the farm log.</p> <p>If cattle are being moved off the farm they must be:</p> <ul style="list-style-type: none"> • Tagged with a farm code and unique number in each ear. • Ideally the numbers would be the same in each ear. # • Any pre-printed tags can be used to use up current stocks. • The farm codes and numbers can be on separate tags if necessary • If moving directly to the abattoir for slaughter cattle may have just numbered tags and be identified for the farm of origin by a paint body brand. <p><i>If moving for slaughter, records must be available on farm to trace this animal back to the holding of birth.</i></p> <p>If existing adult cattle are already double tagged they do <u>not</u> need to have one of the tags replaced by a button tag. The existing tags in each ear are acceptable. However if you are just starting to double tag existing cattle you should ensure they finish up with a reader and a button tag.</p>	<p>Beginning in 2010, every quarter we will send you a registration form to complete. The information we require on this form includes:</p> <ul style="list-style-type: none"> • The tag numbers and details of any calves born and tagged in the last 3 months. • Any cattle that have been slaughtered or died on farm. • Any adult cattle that are now appropriately double tagged. • You can get these via email or hard copy whichever you prefer. Or you can cut and paste the relevant farm records back to us or simply fax or photocopy and post the relevant page out of your farm register. • We will know cattle movements on and off the farm (for disease tracing) via the animal movement certificate copies that you already send to us. <p>**</p>
After 1 st January 2011	AS ABOVE	<p>ALL cattle on the ground must be:</p> <ul style="list-style-type: none"> • Double tagged • Have a farm code and unique number in each ear 	<p>ALL cattle on the farm should be double tagged and <u>registered</u> with the DOA over the course of this year.</p>
After 1 st January 2012	<p>TAGGING AND REGISTERING WILL BECOME A LEGAL REQUIREMENT AND AUDITING OF FARM RECORD BOOKS AND MOVEMENTS WILL PERIODICALLY BE CARRIED OUT BY THE DOA.</p>		

* 'approved' tags are those which are designated 'tamper proof' as can be purchased from Zeetags, Allflex, Leader etc. They will include the RFID tags approved for the NLIS and NAIT systems which are the current/impending national ID system for cattle in Australia and New Zealand.

It may eventually be compulsory that the numbers are the same in each ear so if you are able, begin this system now.

**NB: If you are sending cattle for slaughter and EXPORT

they will need to be registered so that the Falklands, as an exporting country, complies with the EU requirement that beef imported can be traced back to the animal it came from and the animal's farm of provenance. Before the start of the export season we will contact those of you who have expressed interest to FIMCo regarding exporting beef and send you a cattle registration form so your cattle will be registered as a priority. We may ask to audit your farm records before the export season so please ensure they are accurate!

Saladero Open Day & Discussion Days

The DoA, in conjunction with FIMCo and the RBA, will be holding a series of discussion days during late November and early December. The prime focus of the days is to discuss and demonstrate live animal assessment to meet market specifications and reproductive goals for sheep and cattle. These will be hands on sessions.

Time will also be allocated to discuss other issues that producers see as relevant to their businesses. If there is anything you would like us to cover in these sessions please provide this information to the DoA prior to attending the days.

We intend to hold two days on the East and two days on the West. **Saladero** will be one venue with the date set as **Saturday 21st November**. The time, venues and dates for the remaining days will be confirmed via email. We understand this is a busy time however it is also an ideal time to conduct this type of assessment especially for lambs destined for the export market and cattle for the domestic market. We look forward to seeing you there.



OPEN DAY

FALKLAND ISLANDS MEAT COMPANY

SATURDAY, 31ST OCTOBER

The Falkland Islands Meat Company will be hosting an open day at Sand Bay Abattoir on Saturday 31st October 2009, from 10am to 2pm.

Although there will be no actual slaughtering or boning taking place, you will be able to take a tour around the plant, gaining an insight of the whole process from 'gate to plate' and gain a better view of what happens at FIMCo.

We will have displays and presentations on the processing systems and types of cuts and packaging for export, food safety and quality control, documentation and traceability systems and the local market.

At the end of the tour, there will be time for a question and answer session, during which various products will be available to purchase, with proceeds donated to a local charity. Falkland Islands lambskins will also be on display and for sale.

Any interested farmers or members of the public are most welcome to attend. If you would like more information, please contact Matt Kelly on telephone 27013 or email mkelly@falklandmeat.co.fk

If you cannot make the open day in October, but would still to visit the abattoir, then please contact us in advance to arrange another visit. January through to April is quite an impressive time

FARM IN PROFILE: MOUNT KENT FARM

Location: Green Patch, East Falklands

Owner: Dan Whitney

Size: 8,530 ha

Sheep: 1,103

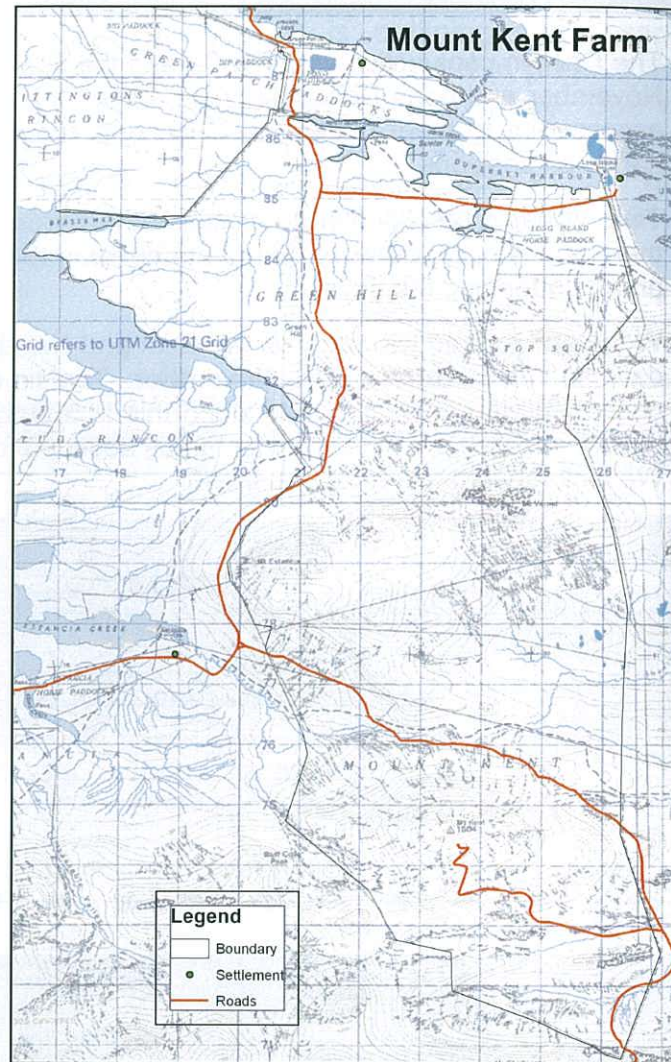
Mount Kent was originally part of Green Patch, which was the first of the larger farms to be sub-divided in 1979/80. Dan Whitney first moved to Mount Kent in 1989 with her husband Pat (who sadly passed away in 2008) when they bought it from previous owners Terence & Carol Phillips.

Dan has one daughter, Zoe (17), who is currently away at Peter Symonds College studying for her A-Levels. Dan and her partner, Leon Mitchell, run Mount Kent as a traditional sheep farm, focusing on fine wool production. Although they both enjoy the modern advantages, such as 24 hour power, Dan & Leon still keep a peat stove, grow their own vegetables and love the camp lifestyle that the Falklands have to offer.

Running fine wool sheep

Mount Kent farm runs 1,103 sheep, which were originally a Polwarth flock, although around five years ago, the Cormo breed was gradually introduced for longer, finer wool and larger framed animals. The Cormo genetics have been introduced through a very small artificial insemination programme and buying rams from the Department of Agriculture, often driving prices up through Pat's wish not to settle for second best!

Although many Falkland Islands farms have now moved into dual-purpose or meat breeds, Dan & Leon plan to continue breeding sheep for fine wool only. This has proved to be a successful move, as the hogget wool in 1990



was 23.7 micron, which they have managed to reduce to 19.3 micron.

Over the past years, Mount Kent has won several prizes for their fine wool, including the Falkland Wool Growers Ltd Fine Wool Challenge in the 2000/2001 season. Dan & Leon are also keen (and successful) competitors in the annual West Falkland Ram & Fleece Show.

Currently not all of Mount Kent is farmed, as some of the mountain areas are very hard to



Mount Kent settlement (from the jetty)

FARM IN PROFILE: MOUNT KENT FARM



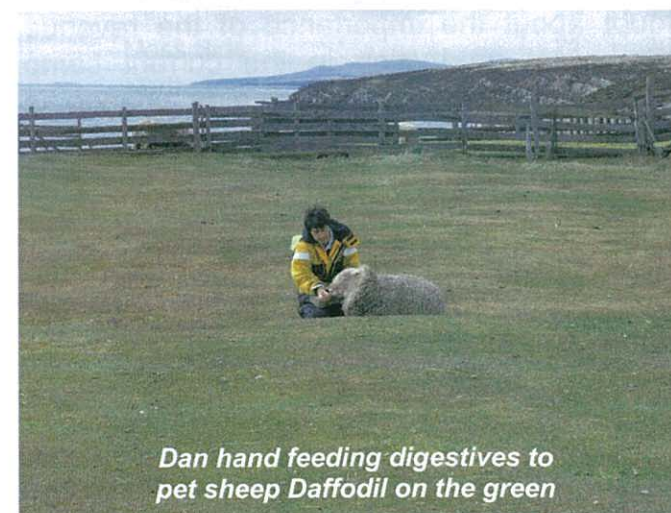
Feeding Special Boy (an AI ram hogget)

gather, although this is something that they will be re-considering in the future.

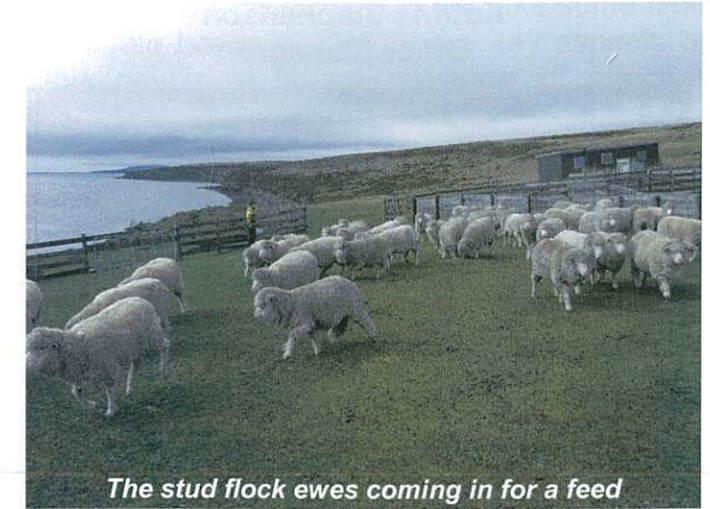
As Mount Kent does not stock a large amount of sheep, Dan & Leon are very focused on working with them as much as possible, with the stud ewes and rams kept around the settlement and fed throughout the winter. This not only improves their condition, but the sheep are quiet and easy to work with – to bring these sheep in you take a bucket, not a dog!

One of the changes that has been introduced, is the bellying and crutching of sheep this season, due to a fly strike problem last year. Dan & Leon hope that this will greatly reduce any risk of fly strike this season and this will also help lambs feeding from the ewes.

Mount Kent is run on a set stocking system, although the camps are naturally spelled and Dan & Leon believe this works well for the land they have.



Dan hand feeding digestives to pet sheep Daffodil on the green



The stud flock ewes coming in for a feed

Other Enterprises

Besides sheep, Dan & Leon also keep around 200 hens for egg production, which they sell locally throughout the year. They stock White Leghorns, which Dan & Leon say lay well. No hens older than two years are kept at Mount Kent and they use an incubator to hatch up to 90 pullets, which is a sufficient number to replace the older stock.

Beside the farm (including sheep and hens), Dan also works at Long Island during the tourist season, helping to serve tea and cakes. Leon continues to work in Stanley, commuting out from the farm each day on the road.

One unexpected advantage of the road network Dan & Leon have experienced is that due to the layout of their land, nearly every camp can be accessed by the road. This works well for moving portable pens and sheep with the truck and saving travelling time.

One idea that Dan & Leon have for the future is to plant tussac beside the shearing shed, to provide food and shelter for the sheep. If this works well, they would also like to expand this to other areas of the farm.



Feeding part of the poultry flock at Mount Kent



Dan preparing hay to feed the sheep

STAFF NEWS

Katrina Stephenson
Office Manager



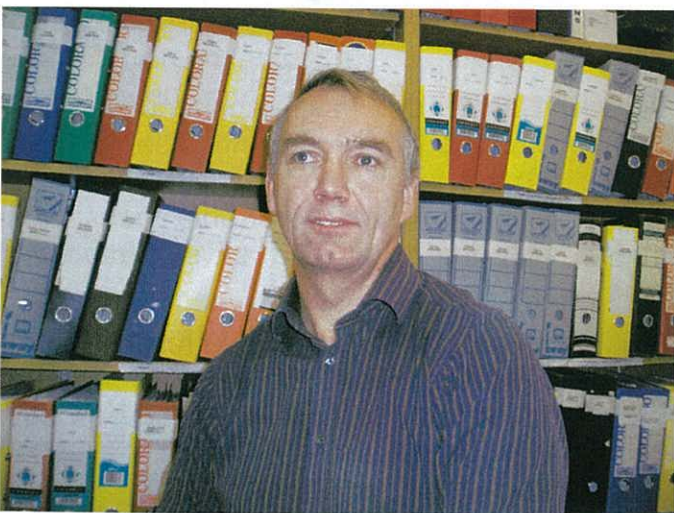
With the current Government restructure taking place, Katrina has moved into the reception office at the Department of Agriculture. Her contact details are:

Telephone - 27355

Fax - 27352

Email - kstephenson@doa.gov.fk

John Barton
Director of Natural Resources



The Department of Natural Resources, incorporating Agriculture and Fisheries, comes into being on 1st October 2009. I have been fortunate enough to be appointed the first Director.

There may not be much obvious change in the first instance. The Department of

Agriculture has run in conjunction with the Department of Mineral Resources for some time with staff, assets and resources spread over two sites in Stanley. Much the same will happen in the case of agriculture and fisheries. Katrina Stephenson has moved from the Mineral's office to the Department of Agriculture. In the longer term there is a question over whether the Fisheries Department might move from FIPASS to a site adjacent to the Department of Agriculture. Such a move would provide for some sharing of laboratory facilities and other resources, but requires further evaluation as an option.

Most of you will know that I have spent most of my career to date dealing with fish and fisheries. Agriculture will be a new experience, although as an ex-resident of Teal Inlet, I do have some experience of camp. In the days when I attended Darwin Boarding School there was pretty much a full Beaver aircraft of pupils from TI alone. So that 'dates' me and you will recognise that it is quite some time since I spent a full day in a wool shed. Despite that, I have been employed by FIG for what now seems quite a long time. One of the advantages of that is that I have a passing familiarity with many of the issues which affect the camp community.

Earlier this year I attended a number of the sessions and meetings held during Farmers' Week. There were numerous topical issues but two aspects in particular made an initial impression. Firstly, whilst I anticipated that meat production would be a major issue it was, nonetheless, striking how prominently this featured in the agenda. There was little doubt about the importance of the revenue from meat production in the current camp economy. Secondly, the pace of change in farming was evident. The number of issues discussed was wide-ranging and there is clearly a lot for me to learn.

I look forward to working with the staff of the Agricultural Department, and to learn how the range of research, service and extension activities undertaken supports agricultural development. The Department has a well established and developed business plan

which guides its activities. I also look forward to meeting and hearing from farmers. I hope to be able to meet you in camp, but if you are passing through Stanley and wish to contact me to express your views or to discuss an issue, then please do so either on telephone 27260 or email: jbarton@fisheries.gov.fk. I will endeavour to divide my time between the agriculture and fisheries offices in some proportion, although my more permanent office is likely to remain on FIPASS for the immediate term. I appreciate this is not quite as convenient as Phyl's office in the town centre.

It has not been my intent, in what is my first contribution to the Wool Press, to comment greatly on the weighty issues facing farming in

the Falklands today. I will get into that once I am better briefed on the issues. It is likely that the new FIG structure will take some time to settle however, one of the key aspects of this new post is the provision of effective policy advice. Being well informed will be an essential part of that and will require close liaison with farmers individually and collectively through the Rural Business Association together with other organisations and companies in the agricultural sector.

Finally, I wish Phyl well as she focuses on the re-vitalised oil exploration programme and thank her for the help she has given in passing on information and providing guidance in the run up to the changeover.

FALKLAND ISLANDS RAINFALL TOTALS

Thank you to all the farmers and members of the camp community who send in their monthly rainfall totals. If you are interested in collect rainfall data and sending the information in to the DoA, please call 27355 or email sferguson@doa.gov.fk and we can post a rain gauge out to you.

	2008			2009								
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Stanley	30	34	34	36	44.5	51.5	90	95	31.5	28	90	20.5
Average	39.5	46	68	74	57	59	58	58	50	46.5	45.5	41
MPA	26.9	45.3	28.8	52.8	52.6	60.6	106.3	105.4	46	159.8	58.1	29
Average	34.8	38.5	57.2	62.1	48	56.1	58.2	50.8	56.5	45.5	38	33
Bleaker Island	12	12	20	35	20	30	-	67	30	30	-	17
Cape Dolphin	16	27	20	21	38	43	74	65	18	12	13	-
Darwin	35	24	18.5	53.5	37.5	46.5	91	87.5	33	37.5	19.5	18
Doyle Farm	20	25.5	-	-	-	-	-	-	-	-	-	-
Dunbar	44	-	38	28	72	45	121	136	45	63	58	20
Fern Ridge	18.5	28	32	49.5	52.5	47	80.5	86	31	65.5	49	16
Goose Green	-	-	-	-	-	-	-	-	-	-	21	-
Head of the Bay	40	34	30	35	53	54	110	105	34	45	64	22
Hill Cove	28.5	34	23	36	110	77	60.5	101	63	60	86	-
Moss Side	-	-	21	20	30	52	82	98	30	-	54	-
North Arm	11	21	27	35	22	31	63	87	46	31	21	12
Paragon	-	14.5	15.5	20.5	34.5	-	78	81	9.5	9.5	12.5	-
Pebble Island	15.5	33.5	9	61	50	49.5	60	107	31	32.5	56	13.5
Port Howard	41	60.5	62	60.5	75	68	118	135	57.5	89	70.5	33.5
Saladero	16	21	22	44	37	39.5	71	69.5	24	28	22	14
Salvador	17.25	33	25	31	50	33.6	80.5	89	32.25	31	47.25	25.5
Shallow Harbour	19.5	25.5	27.5	48	41	30	75.5	71.5	31.5	62	57	19.5
South Harbour	13	25	12	32	-	-	-	-	-	-	-	-
Swan Inlet	22.5	22.5	15	51	35.5	35.5	82.5	81	31	30	55.5	19.5
West Lagoons	30	42	22.5	40.5	75	59	75.5	112	58	69	79	-
Wineglass Station	10	36.5	21.5	52	37.5	43	100.5	75.5	35.5	50	137	15

FARMERS' WEEK DISCUSSION ON MANAGED INTENSIVE GRAZING

By Andrew Pollard

Last month we reviewed the farmers Week session on the Growing and Grazing of Crops and Pasture. Included in this session was a brief presentation on Managed Intensive Grazing.

Set Stocking

How do you calculate the number of stock that you put in a set stocked camp?

- Initially an estimation based on a visual assessment of the camp quality
- Secondly an adjustment of the stocking rate based on previous results

150 years of farming experience has led to the stocking rate of a camp being estimated reasonably accurately.

Managed Grazing

Simulated grazing trials clearly demonstrate that a pasture subjected to managed grazing yields significantly more than a continuously grazed pasture.

There is frustration that productivity has not increased after changing from set stocking to managed grazing.

Why is this the case?

An estimation of stocking rate from camp quality can still be calculated. However, unlike in set stocking adjustment based on the previous years results are not so simple. In a managed grazed system there would have been multiple grazings by multiple stock types and numbers over varying time periods.

It is therefore essential to keep good camp/paddock records. These records need to include stock type and numbers, date in and date out. The accurate paddock size also needs to be known.

Examples we have learnt from Saladero

Table 1 - showing a snapshot of 8 paddocks

Pasture	Kg Dry matter /ha	Rest Period
Green valley	510	0
Little Pond	494	63
David's Bog	406	90
Old House Paddock	263	101
Lily Pond	225	12
Centre Camp	189	0
The Ruins	111	0
Brenton Loch West	83	25

The above table illustrates the estimated feed consumed per hectare over 10 months along with the length of spell that the paddock has received. The spell period is particularly useful for when I go around the farm with Brian estimating available feed. Those camps with a zero spell currently have stock in.

The information indicates to us that Brenton Loch West is one of the worst paddocks on the farm and Green Valley one of the best.

Table 2 - taking a closer look at Little Pond

Stock	Date In	Date Out	Spell
Ram Hoggets	05/11/08	17/11/08	29 days
Ewes & Lambs	16/12/08	01/01/09	74 days
Lambs	26/03/09	16/04/09	

494 kg of dry matter per ha had been taken out of this paddock in 10 months. There was a 74 day rest between the 1st January and the 26th March. It is likely that this spell was too long and that the food consumed had lost nutritive quality (more stem than leaf). Because we know this we will monitor this paddock over the next season and try to increase the amount of feed taken out to 600 or 700 kg of DM/ha (assuming seasonal conditions are similar).

David's Bog 406 kg/ha
Lily Pond 225 kg/ha

Looking at the 2 paddocks above, in my opinion Lily Pond has the better quality pastures in it. Why is it then that Davids Bog has been better utilised?

- Lily Pond is undergrazed, David's Bog is overgrazed or a combination of both
- My judgement of paddocks is wrong!!!!

Looking at the paddock records we know that Lily Pond was spelled between mid-December and mid-March.

Summary

It is my belief that farms changing to a managed grazing system from a set stocking have often suffered a loss in productivity due to this lack of record keeping and the review of these records afterwards.

Whilst DoA advisors can assist you in estimating paddock quality and potential feed availability (this is not easy I may add), we are helpless without paddock records.

Please contact the DoA if you would like any help with estimating camp/paddock feed on offer and a simple system for recording your grazing records.

CATTLE LICE

By Susan Campbell

Cattle lice appear to be an ongoing problem in the Falkland Islands. Some have treated their cattle with Ivomectin in the hope to eliminate the lice but this only treats the sucking lice and not the biting lice. It is believed both forms of lice occur here.

So is it a problem we need to worry about? Well it is probably not a huge economic problem unless the animals are already in poor condition or are young or stressed in which case the lice can cause further deterioration. Normally however the lice cause the animals to scratch constantly especially in the cooler months when their numbers build up with longer haired coats and the animals are in poorer condition. At this stage the animals can rub themselves raw. This obviously causes distress to the animal and may become a welfare issue, devaluing the hide (which is less of an issue in the Falklands) and possibly damage to whatever it is that they are using as a rubbing post e.g. your fences.


If it is only a few animals in a herd that appear to be seriously infected then they are probably suffering from some other underlying illness or stress making them more susceptible to the lice. Healthy well fed animals show little signs of lice infestation and in this case it is probably not economic to treat these animals unless they are with affected animals in which

case all animals should be treated.

Cattle lice come in two forms; biting lice and sucking lice. There is one common species of biting lice and three common species of sucking lice. The difference is that the biting lice *Bovicola bovis* feeds on the skin debris and are responsible for intense irritation, whereas the sucking lice pierce the skin and suck the blood and in very large numbers can lead to anaemia. Sucking lice include the short nosed cattle louse *Haematopinus eurystemus*, the long nosed cattle louse *Linognathus vituli* and the tubercle bearing louse *Solenoptes capillatus*. The different lice vary slightly in appearance and in where they are commonly found on the animal.

All the lice species have a similar life cycle. The female lays eggs attaching them to the hair shaft. These hatch after 8-19days and go through three nymph stages before developing into the adult louse. This takes 3-6 weeks. The entire life cycle occurs on the cow and lice or eggs that come off the cow can not survive more than a couple of days. Cattle lice do not infect any other species of animal. The spread of lice from one animal to another requires direct contact with an infected animal.

Treatment of lice requires the use of an effective insecticide. Mostly these come in back-liner formulations. Many are ineffective against the louse eggs and therefore require



Halloween Trivia...

"Double, double toil and trouble;
Fire burn, and cauldron bubble."

Is part of a witches spell from which well known play, written in 1606?

reapplication 2-3 weeks after the initial treatment. This time period is critical for the effective elimination of the lice. It is most often advised to treat cattle in late autumn to early winter as the numbers still have not built up then and this allows the most effective eradication.

Pour-on treatments are applied along the animal's back. Many have an insecticide which is absorbed into the blood stream and sucking lice are then killed by feeding on the blood whereas biting lice are killed when they come into contact with the insecticide. It is important to follow the directions carefully and to observe the withholding periods for milk and meat. There are also ear tags available that have organophosphates (Warrior) or pyrethrums (Python) present in them. The pyrethrums are only effective against biting lice whereas the organophosphates are effective against both biting and sucking lice. To prevent onset of resistance the ear tags must be removed three months after application to prevent the lice from being exposed to sub lethal doses and it is also recommended to alternate the two types of ear tags.

To ensure that you avoid the development of resistance to the products available it is important to always follow the manufacturer's instructions, do not underdose and check that the treatment has been fully effective. There are also products available that are both an internal parasite treatment as well as a lice treatment.

Although this is probably a very good product to use on cattle when introducing them to a property for the first time it is unlikely that it is a wise choice most of the time as the need for lice treatment is not always accompanied by the need for a drench and vice versa and the indiscriminate use of both at the same time may lead to unnecessary resistance risk and cost.

Eradication is feasible if you ensure you use a chemical that is effective against both sucking and biting lice. Treat all cattle on the property at the one time prior to calving and preferably when they are in reasonable condition and ideally in late autumn when lice numbers are low. Move all cattle immediately to a spelled paddock (one which has been free of cattle for at least one week). Ensure there is no contact with any other stray cattle or neighbouring cattle. Ensure that a second treatment (if required) is given in the right time frame. Check that the treatment has been effective. If the lice are not effectively eradicated in the one year it may be necessary to re-treat the following year in which case it is probably best to change products and use one with a different chemical origin in order to prevent the development of resistance.

Treatment for lice on cattle is not an option on organic farms unless animal welfare concerns exist. If it is necessary then those animals must undergo suitable quarantine and may then not be sold as organic at any time.

INFORMATION ON E.COLI O157

By Stephen Pointing

This bug is very much in the News in the UK at present and I thought it might be useful to write a short article on the subject from a Falkland Islands' perspective. Although we don't have any "petting" farms here in the Falklands there are still plenty of opportunities for members of the public and children, in particular, to come into contact with farm animals especially as the lambing season approaches. Much of this information is taken from a fact sheet on the British Veterinary Association website.

Overview

Escherichia coli (E Coli) are common bacteria which live in the intestines. Most strains cause no ill effects in healthy humans or animals but some strains are known to cause illness in people, including E.coli O157.

E.coli O157 is common in livestock in the UK

(and probably also in FI livestock) and about 5% of cattle may be excreting the organism at any one time. It may be a normal part of ruminant (cattle and sheep) gastro-intestinal flora and causes no clinical signs in infected animals. Other animal species have been identified as excretors but these are the exception rather than the rule.

Useful things to know

- The organisms are excreted in the faeces and some individual animals may be particularly high shedders posing a greater risk to public health. The bacteria can survive for varying periods of time in the environment eg soil or spread in watercourses.
- It is not possible for a livestock owner to identify when an animal is infected or excreting. Testing is of limited value as re-infection can easily occur. It is better to assume that in any cattle population there are likely to be

varying numbers of excreting animals at any one time and take suitable precautions to avoid susceptible humans becoming infected.

- No good method has been identified to eliminate or prevent infection in livestock.
- The infectious dose (for humans) for O157 is thought to be very low at about 10 – 100 cells, compared to approximately 100,000 for salmonella. This is only a guide to infectiousness but does mean that hygiene barriers have to be particularly robust.
- Human infection is acquired via the oral route from animal faeces, usually from food or water. Inadequate hygiene during the processing of carcasses can lead to the contamination of meat, which is the most important food vehicle. This is why it is so important that cattle are killed and butchered in the cleanest fashion possible and is one of the reasons that the EU, for example, insists on the presence of a vet and a meat hygiene inspector to be present during the killing and dressing process.
- There are just over 1000 laboratory confirmed cases in the UK each year. In the Falkland Islands there have been 6 cases between 2005 and 2008 – 5 in children less than 6 years old and 1 case in an adult. In all the FI cases the degree of illness has been quite mild with no need for hospitalisation. The majority of patients have diarrhoea or bloody diarrhoea. About 5% of cases can develop haemolytic urea syndrome (HUS) and clotting defects. This can cause capillary damage resulting in brain and kidney damage particularly in young children and the elderly. O157 is said to be the biggest cause of kidney failure in children in the UK. Most patients recover after kidney dialysis but some have permanent kidney failure. Antibiotic treatment may exacerbate the symptoms.

AGRICULTURAL TRAINEES

By Ian Campbell

At the last AAC meeting a change to the labour scheme was discussed to enable the funds to be used to employ a young person on the farm as a trainee.

The new plan will enable the trainee to live and work on the farm, picking up valuable skills as well as earning some money in what will be for many their first full time job. It is hoped that by doing it this way, as well as picking up some valuable how to skills, there will also be some when and why business skills learned as well.

- Most outbreaks of O157 are associated with food (usually meat) or water. Most cases are not outbreak associated and may have a different epidemiology. Case studies in the UK suggest that contact with animals or the animal environment is the single biggest risk factor and, as we have seen recently, there have been some well-documented petting farm incidents, usually affecting small numbers of children.
- Infected children can then spread the infection to family members or other close contacts.
- Prevention of infection between animals and children depends on good hygiene. Adults need to supervise children adequately to prevent fingers going into mouths after touching any farm animal and make sure hands are washed properly with warm water and soap. It is particularly important to thoroughly clean your hands before eating any food or snacks.
- However, contact between animals and children is an important part of child development and should not be discouraged – but it is important to recognise the potential risks (eg of acquiring an infection but also the possibility of being bitten or kicked) and take steps to ensure that the activity can be enjoyed safely.

Summary

E.coli O157 infections have occurred in the Falkland Islands in the past few years albeit at a low level and with relatively mild consequences. All parents and any adult supervising young children in the vicinity of farm animals (particularly cattle and sheep) need to be aware of the potential dangers and implement simple hygiene measures to avoid the possibility of their children becoming infected with bacteria such as O157.

PROFITABLE SHEEP BREEDS PROMPTS DISCUSSION

By Ian Campbell

The article about sheep breeds using Hew Greirson's figures in last months Wool Press has prompted some good discussion from a number of people. Both sides of the debate are commenting – so we can't have got it too wrong.

Firstly that in itself is good news. Agriculture is never black and white and there is a lot of room for healthy debate. As Mac points out in his article we all need to be champions for agriculture, and at the end of the day we can respect each others point of view and agree to differ. The only way agriculture will survive is for all of us to continually re-evaluate and look at just what we are doing and why. But I digress.

It has been pointed out that 30µ wool from hoggets was unfair. Farm B only shears ewe hoggets as it sells NSL and therefore there is not a lot of extra income.

Changing the hogget micron to 26µ increases income on Farm B by about £2,000

It has been pointed out that the number of ewes;
 (a) Needs to be lower in the dual purpose flock since it takes more feed to grow finer wool and still produce a lamb
 (b) Needs to be lower in the meat breeds because they are bigger sheep and produce more, and bigger lambs.

In fact winter stocking rates are lower in Farm B because the NSL are sold before winter whereas all the OSL in Farm A are kept over winter. The bigger sheep/more lambs argument for Farm B holds over summer. Make your own mind up on this one - are stocking rates limiting production anyway?

Mortality rates were questioned. Farm B lost no NSL from marking to selling whereas Farm A lost 5% because it overwintered and sold OSL. Admittedly this is lower than the Falklands average but with attention to nutrition and worm control is currently being achieved on some farms.

A more typical hogget death rate will lose another £3000 from Farm A.

The bottom line is Farm A is still ahead with the extra £5000 but it is close. Lamb sales and prices from Farm B though are somewhat generous; and we were fairly harsh on these in Farm A. Even so the extra lamb income in Farm B does not quite compensate for the extra wool income in Farm A.

The old adages "Do what you do- but do it well" and "90% of the breeding is what goes down their throats" are most likely the last words on this. Figures will change with world wool and meat prices but reducing death rates and increasing growth rates (of sheep and wool) will always be profitable.

SEEN ANYTHING STRANGE LATELY?!



DON'T LEAVE IT... OR SHOOT IT

Call the Veterinary Section on 27366

**ACTIVE SURVEILLANCE
IS OUR BEST DEFENCE**

Recipe Spot

Provided by Jenny Luxton, Sea Lion Island

Various recipes for Scorpions – a Chartres traditional Smoko Bun

Granddad Luxton's Scorpions

8oz Butter/Margarine
 (in the past Mutton or Beef fat was used!)
 1lb Flour and 2 heaped teaspoons of baking powder
 Self Raising flour can be used instead

Rub these two ingredients together to make crumbs – then add:
 8oz Sugar
 8oz Currants
 1 egg Optional

Milk to form a stiff dough to roll out and cut – about quarter - half an inch thick. Bake in moderate/hot oven – Gas mark 5.

Avis Duncan's Scorpions

12oz Butter/Margarine (as above fat was used)
 1 ¼ lb Flour – plus 2 teaspoons baking powder
 (or Self Raising flour)

Rub together as above. Add:
 Couple handful of currants
 Egg - optional

Milk to mix to stiff dough and roll out as above.

Mary Henriksen's Scorpions

6 oz Butter/Margarine (as before, fat was used)
 1 lb Self Raising flour and 1 teaspoon baking powder

Rub together as left. Add:
 8 oz Sugar
 6 oz Currants
 1 Egg optional

Milk to mix to stiff dough as previous recipes.

Aunt Connie Luxton's Scorpions

8 oz Flour
 1 heaped teaspoon baking powder
 2 ½ oz Butter/Margarine (fat as above)

Rub together as above and add:
 5 oz Sugar
 4 oz Currants
 Egg optional

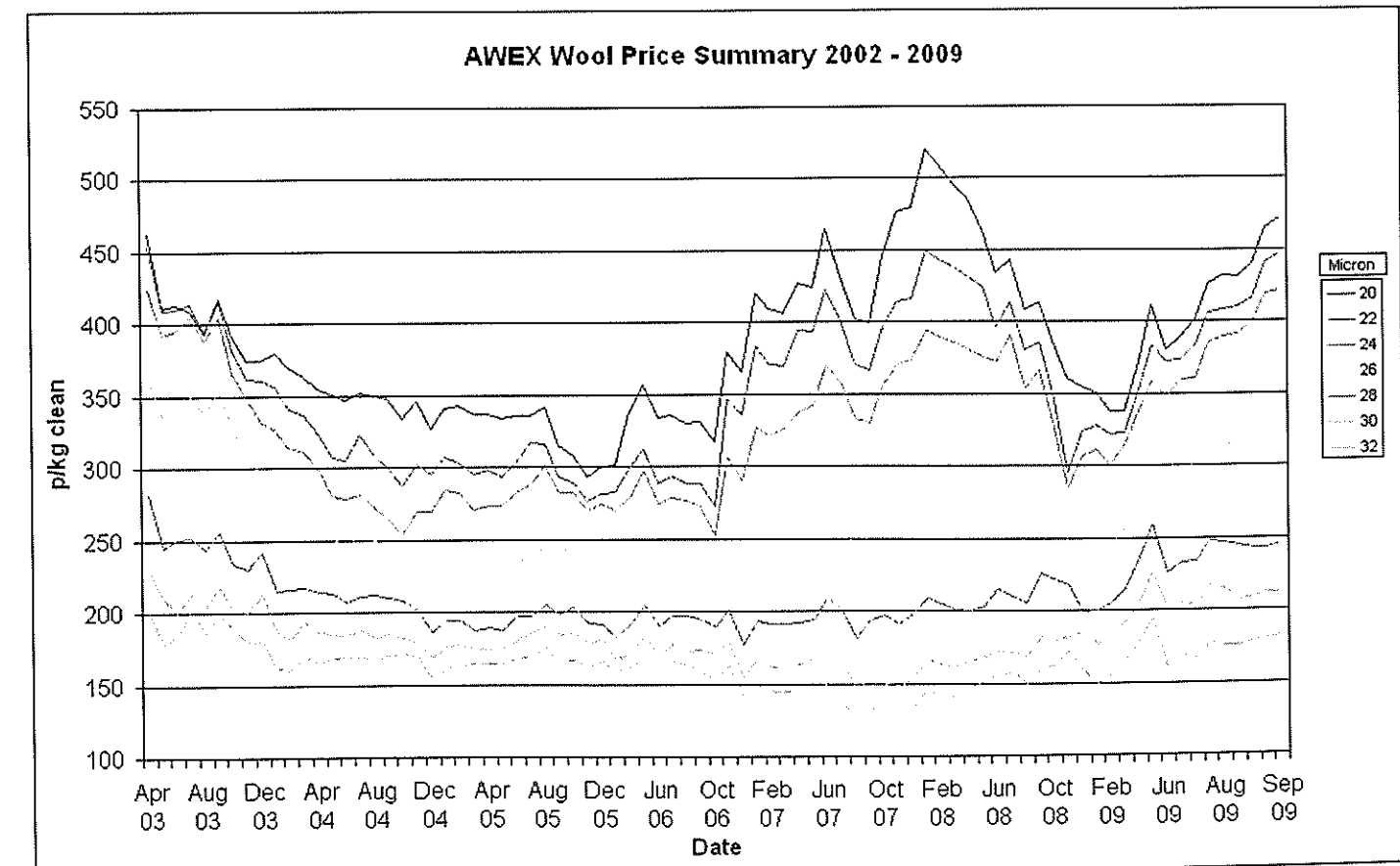
Milk to mix into stiff dropping consistency – put heaps onto baking tray (similar to rock buns) and bake as above.

Chef's Note - I quite often put a heaped teaspoon of mixed spice in my mixture to make a change. All these recipes were given to me by the people named or in Granddad Luxton's case an old recipe book from Chartres. Make some of these and revive Smoko!

If you have a recipe stowed away somewhere that you think other Wool Press readers would enjoy, then please fax it to 27352 or email sferguson@doa.gov.fk

WOOL PRICE TREND OVER TIME

Based on weekly DoA Wool Reports



PUZZLE PAGE

Word Search - Falkland Rivers & Streams

STAGBSKLVYCPFGNDEANSRIVERR
 HUPEAKSTREAMSDODGUYPMNAAWQ
 ARTCGFKHIEMBBULLHILLSTREAM
 NNHHIOSSVQPMBGGJHPKLZGXXYP
 TEEAZCUUJNBLMSWKKLTVIDMFO
 YRHRXVBNMGFEHYEERIEOUBPRGN
 SSOTCVVBNSLEICESTERSTREAMC
 TSLRAWUNTILLCVRSTNAMAHMUH
 RTEELUCRIBCNDAAANFAHNTLNHRO
 ERSSRDEYHARANIRTIAICKTNARH
 AETRIANSUPEACALLTALAFARAEI
 MARIMAIPXEECITTSZILRLRAGLL
 SMEVLLCIDOKCIEOURSSLP SARLL
 TUAEMODNASRARALOUTOCTITRS
 DPMRACKRUSTLSLETYTRSMRLJIT
 IINBLACKBURNRIVEROERMEIJVR
 DOTZAGJJSIEURUASIOAIMAHREE
 LTYILLHCVHAQYHICVNMVSMEXRA
 ITCSTUMEWZMEEZFREPIEULKBBM
 WARRAHRIVERONMVRTSERETYAQV
 YTQSSXVRMHTBLACKHILLSTREAM

- Campbell Creek Stream
- Leicester Stream
- Blackburn River
- Double Stream
- Teal River
- Tern Hill Stream
- Murrell River
- Turners Stream
- Shanty Stream
- San Carlos River
- Fitzroy River
- Peak Stream
- Gibraltar Stream
- Deans River
- Warrar River
- Black Hill Stream
- Chartres River
- Bull Hill Stream
- Poncho Hill Stream
- The Hole Stream

DingBat Brain Games

Flex your brain, free your mind and think laterally

talk	0 > 100 < 0
------	-------------

Sudoku

Each Sudoku has a unique solution that can be reached logically without guessing. Enter digits from 1 to 9 into the blank spaces. Every row must contain one of each digit. So must every column, as must every 3x3 square.

	6	9				1	5	
5			3		9			8
7								3
	5		2	1	6		8	
			8		5			
	8		9	3	4		1	
1								4
6			5	3				1
	3	2				7	6	

Hint:
Describing out loud what you see may give you the clue you need!!

Last Month's Solutions

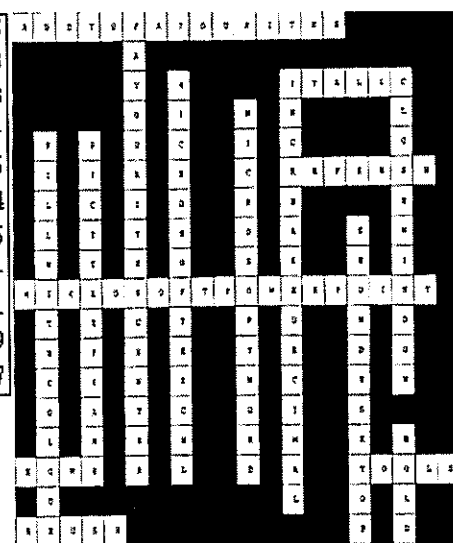
7	3	9	8	6	5	1	4	2
1	5	8	7	2	4	6	9	3
2	6	4	1	9	3	5	7	8
6	1	7	2	4	8	9	3	5
8	2	5	6	3	9	7	1	4
9	4	3	5	7	1	2	8	6
5	9	6	4	8	7	3	2	1
4	7	1	3	5	2	8	6	9
3	8	2	9	1	6	4	5	7

GEG

Scrambled Egg

...HIJKLMNO...

Water



Brainteaser

One step forward, two steps back.

Brainteaser

How many common four letter words can you make from the letters EANM using all the letters in each word?

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Telephone +500 27355

Fax +500 27352

sferguson@doa.gov.fk

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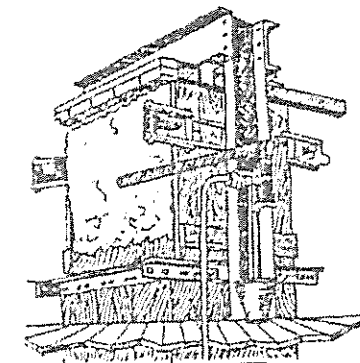
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Plus all the usual features and more!



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EDITORIAL

Waking early this morning to more snow on the Narrows and the hills behind to write this editorial, reminds me what a dreadful winter and spring we have had for lambing ewes and livestock generally. Weather and pasture growth can hopefully only be on the up from now on.

David Waugh, General Manager of FIDC has written an article about the FIMCo Suppliers Working Group which is chaired by David and has 9 farmers and representatives of the RBA, DoA, FIMCo and the Policy Unit. The main objective of this group is to ensure the supply chain of lamb, mutton and beef is produced in sufficient numbers and delivered to FIMCo to ensure its future viability. Ian Campbell has written a complimentary article on the modelling work he has done as part of DoA's input into the FIMCo Suppliers Working Group to meet the targets set by the Working Group.

Zoë has written a most interesting article on what causes rickets in livestock. This condition was exacerbated this past winter in hoggets because of the long periods of cloudy, sunless days but there are other factors involved for you to learn about to prevent rickets. Part 2 will be published next month.

Brian Summers has presented an article on work him and his wife Judy and others were involved with controlling spear thistles on Saunders Island. Action pictures of Judy demonstrating the use of a 'Lazy' chisel hoe and Steve Ford in action enhance the article.

John Ferguson has prepared a most enlightening article on the FIMCo open day held on 31 October. For both those who were unable to attend or did this is a must read article explaining the FIMCo operation and what is required to ensure that it is a sustainable, viable and profitable business in the future.

Susan Campbell has written about fly strike in sheep and how it can be prevented. Although not a huge problem in most years when the conditions are right (warm, humid weather) on the Islands it may be causing more losses than people think so make sure you read Susan's article.

Ian Campbell has revisited the new seasons (NSL) versus the old seasons lamb (OSL) issue with a twist, given the new grade of yearling lamb introduced by FIMCo for the first time this killing season. Ian has put up some estimated costs and partial budgets which you need to consider if you are producing or planning to produce either NSL or OSL. Ian as we all do welcomes comment and debate from farmers on these figures and issues.

Zoë has produced an excellent guide to horse reproduction and foaling for those of you who are into horses. Fraser McKay has pointed out to Ian that he missed a major loss of lambs in his previous article-namely of dying in a ditch. Fair comment Fraser-keep us on our toes!

Enjoy your read and don't forget the Saladero open day commencing at 11am Saturday 21 November. Come and meet the members of the new Saladero Advisory Committee and view the Polwarth sheep, Angus cattle and the managed intensive grazing system as well as enjoying a barbecue lunch.

Mac McArthur
Senior Agricultural Advisor

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NEW SALADERO ADVISORY COMMITTEE FORMED

By Mac McArthur

At a recent Agricultural Advisory Committee meeting a proposal to instigate a new advisory committee to work with the DoA and liaise with farmers and business people on a number of issues related directly to the research and development (R&D) and extension from Saladero Farm was approved.

Advisory Issues

It was proposed that representatives on this committee provide advice on: sheep and wool genetic improvement; beef cattle genetic improvement; cropping management; grazing and re-seed management and agribusiness. The key issues to work on will be the future direction of the National Polwarth Stud Flock; the National Angus Stud Herd; grazing and cropping research & development (R&D) and the Jim Gerrish managed intensive grazing technique to improve plant and animal productivity as well as advice on future R&D and extension priorities.

Members of the Committee

The following people have agreed to be members of this committee: Stephen Dickson, North Arm; Jimmy Forster, Stanley; Keith Knight, Coast Ridge; Donna Minnell, Moss Side; Shelley Nightingale, West Lagoons and Paul Robertson, Port Stephens. Brian Aldridge and I will be ex. officio members of this committee.

Liaison and Communication Role

As well as liaising with DoA staff this committee will liaise with other farmers and business people to ensure that the issues that are being researched, developed and

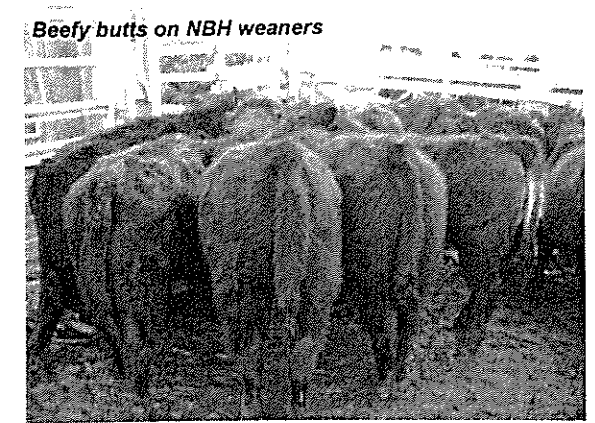
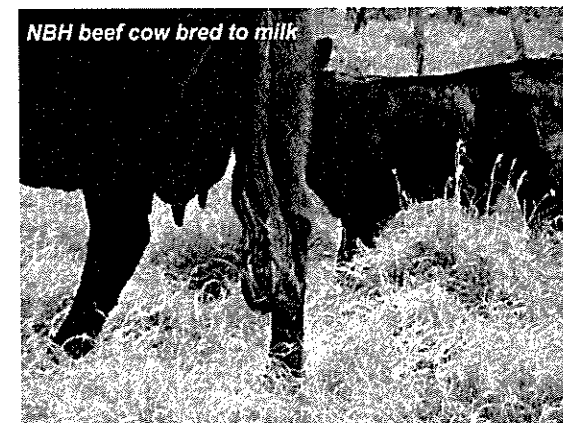
extended are the highest priorities and that information gained is effectively disseminated and discussed/evaluated by the wider camp community. As I see it, effective and accurate communication is one of our major problems in agriculture. People so often perpetuate inaccurate or partially accurate information or are often totally wrong in what they communicate about agriculture and the DoA so one of the roles of this committee will be to try to improve accurate information dissemination.

Cohesiveness

It is becoming increasingly important that all sectors of the agricultural, meat processing and other associated businesses work more cohesively together on issues from R&D, extension, production of livestock (genetics and husbandry), crop and pasture production and grazing management to ensure we have a strong, resilient and highly sustainable agricultural sector in the Falkland Islands now and into the future. Hopefully this committee will be able to play a role to enhance the cohesiveness and connectivity required between farmers, the DoA, FIMCo, FIDC, RBA, wool brokers, local businesses and the wider community.

Open Day and Visiting Saladero

There will be an open day at Saladero commencing at 11am on Saturday 21 November, 2009. All are welcome to come and view the National Stud Flock and National Beef Herd and learn about managed intensive grazing to improve pasture and livestock productivity. If you can't make that day and would like to visit Saladero please make an appointment with Brian Aldridge, the Saladero Farm Manager on 27357.



FIMCO SUPPLIERS WORKING GROUP

*By David Waugh,
General Manager, FIDC*

As most farmers in the Falkland Islands will already be aware, Government has commissioned from the FIG Policy Unit and FIDC a full review of the Sand Bay meat plant. This review is being carried out in two main parts – part I is an Economic Impact Analysis by the Policy Unit and measures the direct benefits and costs of FIMCo and how its indirect and induced effects ripple through the economy. Part II, led by FIDC, is a business review of the company and considers its future viability and sustainability as a commercial enterprise as part of the rural and urban economies.

Both parts will work together and the results of part II will feed back into the final version of part I. The combination of results will then enable conclusions and recommendations to be drawn up and included in the final report to FIG. This is expected to be in November, in time for consideration by the newly-elected councillors. The heart of the Review is essentially a realistic but ambitious 10-year business plan for the company that, if feasible and if approved, would provide both FIG and livestock suppliers with a degree of planning certainty that would allow rational decision-making with respect to operating and capital funding (FIG and FIMCo) and flock structure and farm planning (livestock suppliers).

In developing the business review, it is clear that, if FIMCo is to progress and develop into a commercially sustainable business, major changes and improvements must be made to the quantity, mix and quality of livestock into the plant. It is also clear that, to achieve the required levels of supply, a collective and unified effort will have to be made by the suppliers, the RBA, the DoA, and FIMCo to meet the necessary targets.

With this objective in mind, FIDC has set up a FIMCo Suppliers Working Group that is chaired by FIDC and currently has 15 members – including 9 livestock suppliers, the RBA, the DoA, the Policy Unit and FIMCo.

The farming participation is from East and West Falklands as well as the Islands. The principal objective of the group is to assist in establishing and maintaining a coherent and organised livestock (lamb, sheep and beef) supply chain to FIMCo that will provide for improved planning and co-ordinated strategies to the benefit of all.

The group has already reviewed and agreed the 10-year livestock supply projections that form the basis of the developing business plan for FIMCo, and current work revolves around determining the necessary development of collective supplier performance over the next 10 years in areas such as ewe flock expansion, sheep mortality, lambing percentages, lamb growth rates, and turn-off rates for wethers in order to achieve those projections. This work will also assist the RBA and the DoA in bringing forward appropriate support strategies to assist as and where resources allow.

The work of the group so far has been impressively collaborative and constructive and certainly belies the old saw that farmers are all so independently minded that they can never work together. The work of the suppliers group also complements the work of the other FIMCo-related group established by FIDC – the Livestock Transportation Working Group – and the efforts made by all the participants in this other forum is also highly demonstrative of a willingness to work together to the benefit of all.

The objectives of the FIMCo Livestock Suppliers Working Group also include the sharing of business and farming information amongst members of the group and other FIMCo suppliers with the intention of collaborating to assist all suppliers in making farming business and strategic decisions by sharing data, knowledge and examples. It is also hoped that this can be developed, with the assistance of the DoA, to possibly attract new suppliers to FIMCo.

NOTICE

If you are wanting to dispose of land rover batteries or aluminium cans, then please contact Clean Planet - Octavio Marinovic on 51270, who is recycling them.

RICKETS - PART ONE

By Zoë Luxton

Introduction:

Following on from the cobalt article two issues ago I thought I would discuss calcium and phosphorus in this article because, over the bad winter, we had one or two reports of what we strongly suspect to be rickets in hoggets. I want you to be well informed so you can make decisions and if there is anything you need clarifying please don't hesitate to ring.

Rickets is the term used to describe the clinical signs of bowing legs, lameness, weakness, enlarged joints and in some cases, fractures of weakened bones in young growing animals. What you cannot see grossly is the demineralisation of the skeleton.

These signs are most often caused by a deficiency of phosphorus and/or vitamin D. Calcium is obviously implicated when bones are weakened but it is generally considered that pastures provide enough calcium for animals and it is a lack of a factor that controls calcium absorption (like vitamin D), that leads to low calcium. However, due to our acidic soils (and calcium is low in acidic soils) it is likely that sheep in the FI actually suffer from a gross lack of calcium also, which coupled with low forage phosphorus/vitamin D at certain times of year, leads to bone problems.

Calcium and phosphorus in the body

Calcium is the most abundant mineral in the body and 99% of it is found in the skeleton. Bones grow by the cartilage cells at the end of long bones degenerating and concentrating calcium and phosphorus to release hard calcium phosphate. This impregnates the organic matrix (scaffolding) of the bone. The 1% of calcium not involved with the skeleton is important for nerve conduction and muscle contraction. Calcium is also required for normal blood clotting.

Phosphorus is the second most abundant mineral in the body. 80% of it is found in bones and teeth. Like calcium, the formation and maintenance of bone are the most important functions of phosphorus and the same changes in bone structure occur in phosphorus deficiency as in calcium deficiency. Phosphorus however, is also required for the formation of the organic bone

matrix (scaffolding). The 20% that is not in bone is in tissue fluid and soft tissues of the body and has a range of essential functions. It is essential for cell growth and differentiation. It contributes to cell membrane integrity and plays a vital role in a host of metabolic functions including energy utilisation. It is also involved in the control of appetite and in the efficiency of food conversion and utilisation. Parasites in the small intestine can decrease phosphorus absorption by 40%. Cravings for soil, wood, bones or flesh may indicate a need for phosphorus (or sodium or potassium) and there have been occasional reports of farmers noticing this 'pica'. Deficiencies of phosphorus may also lead to reproduction disturbances and decreased milk yield.

Forage levels:

Forages are generally satisfactory sources of calcium and phosphorus. Legumes particularly are good sources. Concentrates and cereal grains are usually low in calcium but cereals and vegetable protein food sources normally contain adequate phosphorus levels which is well utilised by ruminants. Conservation of crops as silage results in higher calcium levels than if persevered as hay. Liming soils to correct acidity has surprisingly little effect on forage calcium concentrations. Both mineral concentrations decrease as plants age. Beach access to seaweed may augment calcium and phosphorus intake but little is known about the mineral content of seaweed. It is thought that it has a higher calcium content but low phosphorus. The phosphorus status of forages varies widely and is mainly influenced by the phosphorus status of the soil and the climate. Poor thin soils have lower phosphorus values generally and the phosphorus available in peaty soils is invariably low due to the high organic content. Coastal greens have the highest levels of phosphorus due to penguin waste from past colonies. Animals seem to preferentially graze for phosphorus containing herbage and because grasses tend to have lower levels of calcium and phosphorus than shrubs grazing 'monocultures' of grass may lead to an absolute deficiency (or at least an imbalance in mineral ratios) which may result in growth

problems. Natural shortages of phosphorus usually develop in different circumstances from those of calcium and situations where the two minerals are both limiting are rare. Ruminants can tolerate a wide range of Ca:P ratios (normally 2:1 in the body) as long as vitamin D, calcium and phosphorus are all present in adequate amounts. However, if for example phosphorus is low and MORE calcium is added to the diet this will exacerbate the phosphorus deficiency and change the ratio even more, leading to problems. Such problems are likely to occur in young animals in late winter when vitamin D levels are also low. Grazed herbage is not normally rich in vitamin D and vitamin D levels are especially low in animals over winter as the sun falls below the 35° elevation required for UV light to pass through the atmosphere to effectively synthesise vitamin D in their skin (Underwood 1981). The average sunshine hours recorded at MPA over this past winter are at least two hours less than the previous two winters.

Absorption:

Different feeds have different absorption coefficients for calcium. This means there are maximum levels of calcium that can be absorbed from the food despite the demand for calcium that the animal might have and the amount of calcium actually present in the food. For example, 90% of the calcium present in milk can be absorbed by the animal consuming it but less than 50% of the calcium present in more solid diets can be absorbed. A fair question you may then ask is why do animals with maximal calcium needs (growing or lactating for example) not succeed in absorbing more of the available dietary calcium? One theory is that because the body naturally utilises bone stores of calcium at times of peak requirements the dietary absorption is foregone. But why do this if you have a good dietary source of mineral? Well, without this inherent facility an animal would be completely dependent on a continuous and adequate calcium supply via its food so the obligatory use of bone stores is nature's way of ensuring there is always a back up plan in the absence of sufficient dietary supplies.

Dietary calcium is mainly absorbed from the small intestine and control of its absorption is via parathyroid hormone and

vitamin D3. The parathyroid gland is very sensitive to changes in plasma calcium and when this drops parathyroid hormone is secreted. This activates vitamin D3 which basically opens up calcium channels in the intestine. Provision of an external source of vitamin D enhances the efficiency of absorption of calcium from the diet. When calcium supply is excessive the mechanisms are reversed and the amount absorbed is decreased.

Mobilisation of calcium from bone is also under hormonal control but there are more complex mechanisms involved. In late pregnancy and during lactation one fifth of calcium from the skeleton is mobilised and this is a proven obligatory process as it is not reduced or reversed by supplying more and more dietary calcium. Heavy milking dams that are on calcium deficient diets can successfully rear a lamb and survive with no clinical signs by using up to 20% of their skeleton reserves of calcium as long as the bones were fully grown and normally calcified to begin with. The calcium must be replenished before the next high demand for it however or the ewe will begin to suffer.

Unlike calcium there is no tight hormonal control of blood levels of phosphorus and it is extensively, and normally excessively, absorbed and the surplus excreted.

Lambs can continue to grow on phosphorus deficient diets but the bone matrices are less mineralized which can cause potential problems.

In adults needing phosphorus the demineralization of the skeleton does not provide the same amount of it as calcium (as it is present in the skeleton in 2:1 ratio so half the amount of phosphorus is released compared to the amount of calcium) and the utilization of these phosphorus stores is less efficient than the use of released calcium as lots of the mobilized phosphorus is lost in the faeces.

Bone disorders

Calcium and phosphorus are needed to mineralize bone and they are normally present in bone in a ratio of Ca:P 2:1. As mentioned above this ratio can change slightly in a response to a deficiency of either mineral but when there is a prolonged deprivation of one of them the bones will be demineralised

and this loss of calcium and phosphorus from the skeleton will cause signs such as lameness, enlarged and painful joints, possible fractures, bending and twisting and deformation of bones and malformation of teeth and jaws. Re-absorption of minerals when they are needed does not occur equally from all bones. The ends of long bones, ribs, vertebrae and the sternum are all affected before the compact shafts of the long bones and the extremities. The minerals decrease together when the bone reserves are mobilised and the proportions of calcium and phosphorus remaining in the bone are the same, they are just present in lower amounts.

Diagnosing low calcium, phosphorus and vitamin D

Blood sampling to check calcium and phosphorus levels can be inaccurate for a number of reasons as some of the minerals present are bound to other proteins for example and measuring the levels actually present can be very difficult. X-raying or analysing bones to assess their make up can be a much more helpful method.



A Falklands sheep with rickets

Traineeship scheme about to get underway

The DoA can provide funding for farmers to employ any young people interested in agriculture as a trainee, providing on-the-job training. Trainees will stay on the farm and work for £5 per hour and learn about the farming skills needed in the Falkland Islands.

If you are a farmer interested in being a trainer/mentor or a young person interested in being a trainee please contact the DoA for an application form or contact Ian Campbell.

Questions you may ask...

What does being an agricultural trainee involve?

For £5 an hour plus a bed and meals, you will be working on a farm and learning hands on farming skills for up to three months.

What skills can I learn?

This can depend on the farm that you are working on. Basic farming skills can include: stock work; fencing; general farm maintenance; mechanics; accounts; record-keeping; doing various jobs in the shearing shed; welding; carpentry; and much more.

Who is eligible to join the scheme?

Anyone who is interested in agriculture as a career from school leaver age up to 30 years old.

Is there the opportunity to learn other skills?

Not at the moment, but if there are enough people interested, we could get support for other training and skills to be included.

So I'm interested, where can I find out more info?

Speak to any of the DoA staff today and pick up an application form. You could also call us on 27355 or email kstephenson@doa.gov.fk

MEETING FIMCO'S FUTURE LIVESTOCK PROJECTIONS

By Ian Campbell

What's in a number?

In the 10 year FIMCo plan the number of lambs processed each year will be progressively grown from the current 14,000 up to 66,000. Doesn't sound too bad when you say it quickly. Future funding projections need to be based upon throughput- and these projections need to be achievable.

Where are we now?

Currently with a 61% lambing from the 194,000 breeding ewes on the Falkland Islands there are about 58,000 wether lambs born and 24% of these are processed by FIMCo. Clearly to reach these ambitious targets a number of things will need to change. The final figure will be the result of improvements in a number of factors. If any one of these doesn't improve as much - the others will need to improve more to compensate. It is a simple mathematical calculation.

Increasing ewe flock size

The ewe flock will need to increase to at least 250,000. To do this lambing percentages need to improve by 5-10% over the 10 years, and the level of ewe hogget mortality needs to drop by about a half- from the current estimate of 20% to 10%. This will allow the number of young ewes being recruited to outnumber the old ewes being culled or lost during the year- and the flock can grow.

Increasing lamb sales

The number of wether lambs being sold to FIMCo will need to grow from 24% to well over 50%. To do this we need to work out why they are not currently being sold. If it is that they are not big and fat enough then we need to improve lamb growth rates. If it is because they are choosing to be left as wethers for wool production then this will be partly resolved by the increasing ewe flock and hopefully cattle herds using the pasture

resources currently used by wethers. There will however be a role for some wethers on some camps where asking breeding ewes to perform might be "unfair".

How will it happen?

Firstly it must be noted that some producers are currently operating at levels which will easily allow these projections to be met. The two main keys are in the nutritional and health management areas. Whilst there is little we can do about the weather or the intrinsic nature of Falkland Island soils, there are things we can do about the sheep.

Grazing management systems will need to be implemented that allow ewes onto wether camps at times and this will allow the naturally better camps to be used more strategically. Despite this even better feed resources in the form of crops and reseeds will need to be created and used strategically and effectively to prevent lamb loss or hogget loss. Stock traps like ditches and reefs need to be fenced out or made safe.

Managing flocks, with strategic worm control and weaning management will need to be improved so that lambs can be grown at optimal rates in the relatively small window of opportunity that is the pasture growing season. This will both finish wethers for FIMCo- and fatten ewe lambs to survive the winter and allow them to be eventually recruited as breeding ewes.

How ambitious is it?

Quite. But the harsh reality is that this is not being driven by FIMCo or FIDC but by the terms of trade in agriculture. The fact is that twenty years of inflation has not increased the price of wool by even a penny. At the same time the costs keep marching relentlessly up. While we currently help with FIP schemes and labour schemes- the long term political pressure is always on this to be reduced. If a viable, sustainable farming community is to remain on the Falkland Island some of these things need to change anyway.

SAUNDERS ISLAND - SPEAR THISTLE CONTROL PHASE 4

By Brian Summers, South Atlantic Invasive Species Project

The first phase of the Spear Thistle control at Elephant Point camp on the northwest of Saunders Island was covered in the January 2009 edition of the Wool Press; towards the end of January Judy and I spent a weekend hacking thistles with "Lazy" chisel hoes and volunteers Jess Abbott and Claudia Michler spent five days in February doing the same, thus reducing considerably the amount of seed that was set.



"Lazy" chisel hoe in action



I returned to Saunders at the end of September with Steve Ford and with five days of glorious sunshine we spot sprayed using over 300 litres of selective herbicide. The difference this time was that we were mechanised; David and Suzan having loaned us a motorbike and quadbike, Steve with a knapsack sprayer on the bike did the slopes of Mt Harston and I had the quad on the flat, the quad was fitted with a 50 litre tank on the front and an 80 litre tank on the back. There was one small area with a nesting black necked swan that we were unable to spray. With the SAIS project closing at the end of the year, it is hoped that future funding can be found to enable the work that has been started to continue.



FALKLAND ISLANDS MEAT COMPANY - OPEN DAY

By John Ferguson
General Manager, FIMCo

FIMCo hosted an Open Day on Saturday 31st October. A good mix of farmers, general public and prospective councillors attended, and visitors were able to discuss and follow through the entire processes, from livestock selection to the product reaching the customer in Europe.



Prime New Season Lambs from Fitzroy

The changes, both benefits and difficulties, in livestock transport were discussed and how it affected both producer and FIMCo. Those producers on the far West will be adversely affected, unless a cost effective and workable solution can be found, and concerns were expressed that the 2010 export season is not far away for this to be addressed.

Slaughter Hall

Leading into the production areas, which were just cleaned up in time, as some cattle had been slaughtered in the morning, having arrived from the west the previous evening, visitors were able to listen to a good explanation of the slaughter system by Export Slaughter Foreman Arturo Tellez. The new Electrical Stimulation system which was installed in 2009 was demonstrated by DVD, which essentially assists in the tenderisation of the product.



Arturo Tellez,
Export Slaughter Foreman

Moving into the carcass chillers area, the capacities and pressure on this area was explained, being designed on the English abattoir system rather than export plant, which needs at least twice the capacity in order to complete the 'setting' and tenderisation process. Microbiological testing requirements of both fresh carcasses and contact surfaces were shown by details of the process required and some

actual results from 2009, which demonstrated that FIMCo is well within the strict parameters set by the EU.

The **Local Market** processing area, purpose built as part of Phase I of the plant upgrade to replace the converted 40' container previously used, was opened up with a good number of photos and other information showing this side of processing in operation. Sales revenue for the non-export operation accounted for 25% of the total income in 2008-09, a significant contribution to the turnover.



Lynsey Sutcliffe, Local Market Supervisor
(during the export season) / Driver

Export Cutting Room

The heart of the export operation is the Cutting Room, where chilled carcasses are transformed into a whole range of products, from retail lamb legs and French Racks (restaurant style lamb chops) to mutton and lamb primals to layer or bulk packed 25kg cartons of boneless mutton for the food processing industry. Essentially, for mutton the work is mostly on the cutting tables with more simplistic packing, but when lambs are processed the amount of effort and complexity of the packaging and labelling is directly reflected in the price received.

For example, a lamb leg may be cut and trimmed to a certain customer's specification, but if the processor (FIMCo) then calibrates, labels and packs the cut into a number of different weight ranges, the return is considerably higher for very little additional work. This is where export plants make their increased or 'value added' return from a standard product. Of course, all types of product need to be stored separately for efficient stock control and ability to reach when loading into the shipping containers, and this is where FIMCo currently struggles a lot. There is not only insufficient space in the cold store for product separation but also there is not enough space to accumulate enough product in order to utilise 40' reefer containers, which are much less expensive to ship.

All processing is carried out under the watchful eye of Matt Kelly (Production Manager) with Nigel

SATURDAY 31st OCTOBER 2009 - SAND BAY ABATTOIR



The export Cutting Room in full swing during 2009

Leach (Quality Control) conducting ongoing checks.

Where does the Falkland Is product go?

As the Falkland Islands meat industry and markets develop, destination countries will no doubt alter, but essentially, the cuts from lighter lambs and mutton are more favoured in Scandinavia & Spain, with the heavier cuts and manufacturing mainly going to UK, France & Germany.

Salted sheep & lambskins have also been successfully exported to the UK, Chile and Uruguay, with some of the lamb skins being tanned and returned from Uruguay as decoration skins. Processing salted skins in any volume is impossible at present as the necessary space is being used as temporary livestock housing until it is rectified as part of the plant upgrade (or maybe this should really read as 'completion'?)

How is it marketed?

The international meat industry is new to FIMCo and the Falkland Islands, and in 2003 it was soon recognised that a 'one person does all' marketing manager just doesn't have the specialist industry knowledge to market products from a number of different industries.

The knowledge and skills for marketing fish are quite different to say, wool or meat. This is why FIMCo took the critical step to engage the services of a successful company (Simunovic SA of Punta Arenas, Chile, who has several large farms producing in excess of 30,000 lambs for processing in



John Ferguson in discussion
with Miles Bunker, TransOceanic
Meat (FIMCo's largest UK
customer in 2009)

addition to a large modern lamb & beef export production plant) who is well respected in the meat industry for producing a consistent high class product. Acting as sales & marketing agents for FIMCo, Simunovic researches the market, introduces new customers and then both Greg Somervell (the Simunovic agent) and GM FIMCo discuss and agree prices with the customer. FIMCo has

the final say on all sales prices, which then translate into a contract between FIMCo and the customer, with payment in total being made directly to FIMCo.

FIMCo Review & Revised Business Plan

Visitors were able to discuss the controversial matters affecting FIMCo's subsidy level and whether the company could demonstrate an ability to move into profit and a potential timescale. Whilst the Business Plan revision is near completion and will be taken to the FIMCo Board for consideration and approval in the near future, the FIMCo Review (being carried out by the Head of Policy & FIDC) is also expected to be completed and presented to FIG shortly.

Whilst produced in much more detail, the revised Business Plan is expected to generally confirm the 2007-08 estimates, which projected the company moving into profit in approx 2017-18 with decreasing levels of subsidy required in the preceding years.

What is required to move into profit?

- Completion of Phases II & III the Sand Bay plant upgrade, to make the operation more efficient and able to harvest and sell more of the product
- A concerted effort by the majority of farms (it is recognised that not all farms will be willing or able to participate) to take their average lambing percentage from 64% to 70%; a decrease in death rates and increase in ewe body condition etc, which the more progressive producers are improving on, with the assistance of the DoA and FIP. A tough call, but one agreed by the leading farmers, DoA, FIMCo & FIDC as ambitious, but achievable.

Lastly, some lambskins were sold and a range of local meats were transformed into several very nice curries and a casserole by Falklands Brasserie, with the proceeds of the day (approx £300) going to a local Cancer Support charity.

Dugs are redundant!

A HUGE debate has arisen after Tesco's comments regarding the use of working collies and the stress levels caused to sheep. This stems from a Tesco representative's supposed report that, whilst on a lamb buying trip in New Zealand, he was 'disturbed' at the level of ferocity used by the huntaways whilst herding lambs into the abattoir.

Radio 2's Jeremy Vine hosted a heated debate between ex-One Man and His Dog presenter, Robin Page and Alistair Currie, campaigns co-ordinator from People for the Ethical Treatment of Animals (PETA). Mr Currie insisted that working sheepdogs should not be used to herd sheep as the stress levels caused by the dogs was scientifically proven and that farmers (as ever) were an unfeeling lot who only used sheep as a means to make money with little thought for their welfare!

The general idea was that it would be much kinder to the sheep if they were herded



"Well Trevor, Sabastian it's all yours. If you are not back by breakfast, Doddie will send the dugs up!"

by people shouting, beating the ground with sticks and shooing them with red flags.

Naturally Mr Page took the opposite stance and told him that he was talking 'absolute balderdash', possessed no common sense, welfare was the highest priority and that sheep farming would be impossible

without collies. It made me wonder if the BBC is considering a new 'countryman' series - perhaps 'One Man and His Flag'? You can just see the next International trial, featuring lots of men and women poncing about like Morris Dancers trying to shoo the sheep through the gates. Aye right.

SEEN ANYTHING STRANGE LATELY?!

DON'T LEAVE IT... OR SHOOT IT



Call the Veterinary Section on 27366

ACTIVE SURVEILLANCE IS OUR BEST DEFENCE

STRIKING OUT AT FLIES

By Susan Campbell

Fly strike is not a huge problem in the Falklands but it does occur and may contribute to losses of sheep either directly or due to considerable weight loss that is associated with fly strike. Fly strike here is nearly all breach strike (i.e. around the tail end) although it can also occur on scrotal wounds as a result of lamb marking, dog bites or on rams heads as a result of fighting or any other wounds where the wool becomes damp and attracts flies.

Faecal staining from scouring will provide the damp and smelly wool which attracts the flies which then lay their eggs. After hatching the larvae crawl to the skin which they then lacerate using their anterior hooks and they secrete proteolytic enzymes which digest the tissue. The larvae irritate, injure and kill successive layers of skin and produce further exudates which in turn attract more flies often of different genera which may cause secondary strike which is an even more severe form with the maggots feeding deep in the subcutaneous tissues. The secondary flies often bring with them bacteria. The animal normally dies from shock and toxins produced by bacteria in the wound. The lesion may contain thousands of maggots with each fly laying up to 1000 eggs and the life cycle taking as little as 7 days in ideal conditions such as warm temperatures.

Prevention and treatment

The best way to prevent breach strike is to have good parasite control thus preventing the severe faecal staining which leads to the strike. Also faecal contamination can be greatly reduced by docking lambs tails at the third joint which equates to the tip of the vulva in ewe lambs or the equivalent in ram lambs.

If sheep are stained then crutching may be necessary. In areas where sheep congregate, fly traps can be used to reduce the fly population. This method would be most desirable for organic farms.

Treatment of shearing and lamb marking wounds with an effective larvicidal preparation may help to prevent fly strike. The only preparation currently available in the Falkland Islands appears to be a diazinon powder which will kill maggots that are currently present on the sheep but is not ideal for prevention of fly strike. In this case it is better to use an Insect Growth Regulator such as 'Vetrazin'. This can be made up into a solution and is then sprayed around the area where the flies may be attracted to e.g. a castration wound and the protection will last for up to 12 weeks. It is very important when using any of these products that you observe the withholding periods before shearing any sheep that are treated. If you have fly strike shortly before shearing the only product that is available with no withholding period is 'Extinosad' which is an extremely safe product derived from soil bacteria and is the only product which is available for use on organic farms.

When affected animals need to be treated it is important to remove the wool and treat the wool as well as the wound in order to prevent a reservoir of flies. If the animal seems very sick due to extensive deep fly strike it is sometimes necessary to give them an antibiotic injection also.

It is very important to realise that the main source of flies for primary strikes is other struck sheep. **Flies do not fly large distances so the problem is home grown.** For this reason early detection and treatment of fly struck sheep is critical to eliminating the problem.



The DoA will be holding an open day at **Saladero** on **Saturday 21st November**. The open day will begin at 11:00am at the cattle yards located just inside the Saladero boundary. The aim of the day is provide the farming community and the general public with an overview of the key areas the DoA are working on at Saladero.

This will be done by taking those interested in the day on tour starting with the National Beef Herd, moving onto view a

sample of the improved pastures planted, demonstrating managed grazing and ending up at the shearing shed to view the National Stud Flock.

Refreshments will be supplied on arrival at the beginning of the day with a barbecue lunch on sale once we have reached the shearing shed. The day will close at 3:00pm.

This is an open invitation and we looked forward to seeing you at Saladero on Saturday 21st November.

Cattle Lice in Pictures

If you were interested in the Cattle Lice article that Susan Campbell wrote in the October 2009 Wool Press, then you may be interested in these two pictures of cattle lice that were collected off cattle in the Falkland Islands within the past couple of months.



Left: one of the three sucking lice found in the Falklands



Right: biting lice



Dates for the Diary

21st November	Saladero Open Day - call 27355 for more details
8th December	Battle Day - Public Holiday
16th December	Dog Dosing (Droncít) Please remember to contact the veterinary Service on telephone no 27366, fax no 27352 or email imports@doa.gov.fk and advise when your dogs have been dosed



NSL vs OSL

By Ian Campbell

New Season or Old Season lamb? I have discussed this before but I want to look at it from a different angle. Some of the concepts are now different with a new grade of lamb - Yearling Lamb. Perhaps the window of opportunity for OSL has been slightly narrowed by this.

Both systems rely on good lamb growth rates while on their mothers and at weaning. Either to fatten a NSL or to grow a potential OSL big enough to survive winter in good enough condition to re-fatten by the mid March cut off date.

Advantages of NSL	Advantages of OSL
Quicker cash flow (interest cost) More efficient feed conversion Better quality lambs More generous price schedule Frees up grazing land for other uses Less work than OSL	Fleece income received Opportunity to make more informed decision on future wool price or wether selection. Second chance to make the FIMCo grade
Disadvantages of NSL	Disadvantages of OSL
No fleece income Maybe lighter weights Labour may compete with shearing Need to get things right as it is hard to achieve good NSL weights	Risk of death over winter Risk of cutting their teeth <ul style="list-style-type: none"> Downgraded to yearling lamb Downgraded to mutton Increase in winter stocking rate on farm Poorer quality (re-fattened) animal Labour may compete with shearing More work than NSL Less time available in export slaughter season

Costs and Returns

The farm statistics gives a very good description of returns. Unfortunately the understanding of the costs involved in agricultural enterprises is far less developed.

Feed. For extensive rangeland situations feed is an indirect cost, but a cost none the less. A NSL lamb might eat on average one kg per day for 150 days to produce 15 kg of carcase. A ratio of 10:1. An old lamb might eat on average 0.8 kg per day for 400 days to produce a 16 kg carcase, a ratio of 20:1. Whilst it is difficult to put a £cost on this - there is a true opportunity cost (ie the feed could have been given to something else which would have benefited). Hoggets do need to have a good camp and the more lambs that are sold the less animals needing to graze the hogget camp over winter. Hard to put a figure on this but about £0.90/lamb

Labour. Extra labour is associated with the extra gathering required, most likely drenching, and mousing of lambs to attempt to reduce downgrading due to teeth. £0.60/lamb

Drench. It is most likely that on many farms a drench will be required for OSL before they are turned out to camp in winter. Depends on the drench used but about £0.20/lamb

Death. Estimated death rates of 20% in hoggets are normal however the type of well grown lamb suited for the NSL trade might be expected to have a better than average survival rate.

Downgrading. Downgraded animals from OSL to Yearling lamb is a risk that farmers get little notice of, and further downgrading to mutton can occur very quickly.

Optimal prices for NSL and OSL are £1.50/kg, for Yearling Lamb £1.20 and for mutton £0.55/Kg.

For example a 15 kg carcase may be worth £22.50, then £18.00 then £8.25 as it erupts teeth and gains teeth in wear, a process that can take as little time as 3-6 weeks.

The longer you leave it (which you would do to allow growth to occur) the higher the number of downgraded lambs you would expect. It is likely that mutton on many farms

will not actually be sold once a teeth assessment has been made- it will be kept for wool production.

Below: Partial Budget for OSL and NSL (assuming 100 lambs averaging 15 kg Carcase weights)

	No	Death%	% NSL	%OSL	%YL	% Mutton	Income
NSL	100	3	97	0	0	0	£2,183
Good OSL	100	10	0	85	5	0	£2,390
Poor OSL	100	20	0	65	10	5	£2,028

Costs and returns	Meat Value	Wool Value	Drench Cost	Extra costs	Animal Income
NSL	22.50	0.00	0.00	0.00	22.50
OSL	22.50	6.00	0.20	1.50	26.80
YL	18.00	6.00	0.20	1.50	22.30
Mutton	8.25	6.00	0.20	1.50	12.55

This quick analysis shows that OSL can be financially better however it needs to be done with a lower than typical death rate and diligence to ensure a low downgrading of OSL due to teeth issues. If these cannot be achieved then NSL is the more profitable.

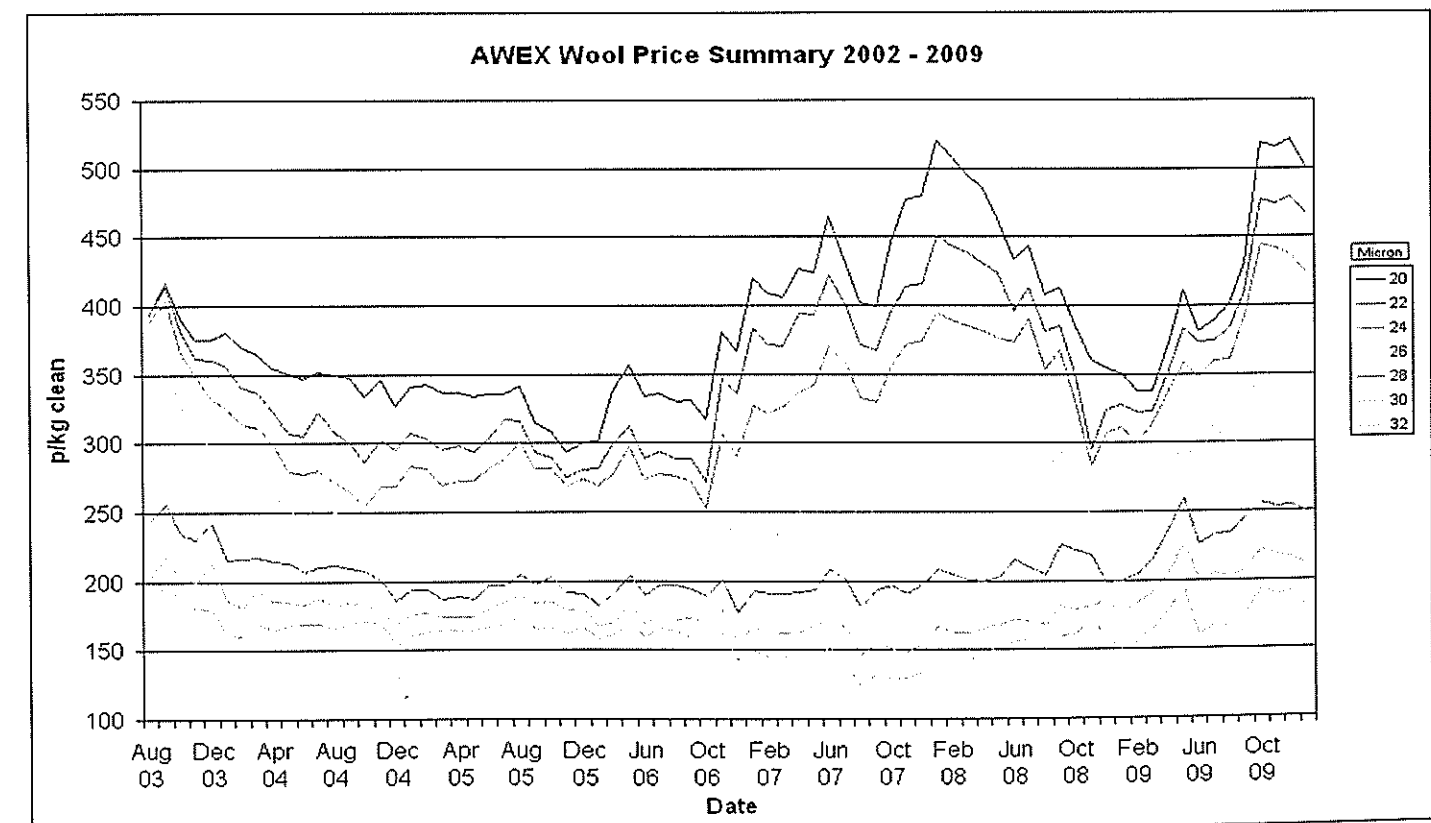
If OSL and NSL have different carcase weights then values will also differ.

Fleece values are Net of shearing costs etc. If the fleece is worth more (eg it is finer) then the equation shifts towards OSL; and if the fleece is worth less (eg terminal sire bred) the equation shifts towards NSL.



WOOL PRICE TREND OVER TIME

Based on weekly DoA Wool Reports



A GUIDE TO EQUINE REPRODUCTION AND FOALING

By Zoë Luxton

Introduction:

Before breeding any animal it is common sense to consider:

- Am I equipped and prepared to deal with the work and costs of breeding, rearing and homing offspring?
- Do I want offspring from this particular female? Consider temperament and physical attributes that may be passed on to the offspring.
- The condition of the female and feeding requirements before and after parturition (birth) and lactation.
- The size of the female compared to the male. If the male is considerably bigger this may lead to large offspring and thus birthing problems.

Summary of Equine reproduction:

- Reproduction in the horse is seasonal.
- Ovulations (and therefore fertile periods) are very minimal in the winter and maximal in the summer.
- Season also has a pronounced effect on the performance of the stallion.
- During the main reproductive season mares will come into heat and ovulate every 18-24 days.
- October, November, December and January constitute the peak reproductive period in the Southern Hemisphere.
- Periods of 'heat' (oestrus) will last 3-9 days in each cycle and the release of the egg (ovulation) takes place near the end of the heat period (24-48 hours before it ends).
- Fertilization of the egg can occur up to 30 hours after the egg is released.
- The fertilized egg (called a blastocyst) can rattle around in the uterus for up to 2 months before it implants.
- Pregnancy lasts for 310-365 days.
- So, by the time the mare has foaled it is once again reproduction season and the foal oestrus (first heat after foaling) occurs 5-12 days after she has foaled.

Detecting when the mare is in season:

- Close observation of the mare is the best and most common method used to detect seasons (oestrus periods).

- The behavioural signs of oestrus are much clearer when the mare is in contact with, or near to, a stallion.
- When in oestrus she will seek out other horses, especially stallions.
- She will stand close to the stallion and not move when he nips while investigating her.
- She will urinate frequently and her vulva will 'wink'.
- The vulva becomes scarlet or orange and glossy and wet looking with a thin, clear mucus discharge.
- Mares that are not in oestrus will not show these signs and will reject the advances of other horses.
- At the start of the heat period the signs will be vaguer but build in strength until the moment of ovulation (egg release from a follicle on the ovary).
- Having a foal at foot may disturb normal oestrus behaviour.

Time of mating:

- Mares are most fertile just before or around the time of ovulation.
- Ovulation takes place 24-48hrs before the end of the oestrus period but as this period varies in length (3-9 days) it is not possible to accurately predict when ovulation will occur.
- When you cannot predict time of ovulation, mares should be teased daily with the stallion when showing signs of oestrus and let him serve her as soon as she will accept him.
- She should be served every other day until she does not accept him any more.
- The advantages of this method are that it is simple and easy with no veterinary intervention required.
- The disadvantages are that you need several matings to result in a pregnancy which is difficult if you have to travel the mare to the stallion or he has several mares to cover.
- This teasing and covering will of course occur naturally if the mare is just left to run with the stallion.

Is there not a more definite way to predict when she has ovulated?

- An injection of Chorulon® often induces ovulation in most mares 24-48 hours after injection if there is a follicle present on the ovary that measures over 2.5cm.

- Unfortunately we do not have the facilities, equipment or the expertise here to ultrasound scan mares to visualise and measure follicles and thus accurately predict ovulation times.

My mare does not seem to ever show signs of oestrus – is she infertile?

- Remember that the behavioural signs of oestrus are much clearer when the mare is in contact with or near to a stallion. She may just be cycling with very few signs.
- She may be perfectly capable of cycling but there is a persistent corpus luteum that is delaying the return to normal cycling. A corpus luteum is the part of the follicle that remains after an egg as been released. These normally regress after ovulation but in some cases they can remain and because of this the next cycle cannot begin.
- An injection of estrumate (which is a synthetic prostaglandin) will cause regression of any corpus lutea on the ovary and thus a return to normal cycling. This will not work if the mare is not cycling at all, in which case there will be no corpus luteums to work on. Also, in the normally cycling mare there is a refractory period of 4-5 days after ovulation when she will be insensitive to the effects of estrumate so if ovulation has occurred but you have not seen any signs of oestrus behaviour an injection in those 4-5 days will not bring her back into season.
- She may be truly in anoestrus ie not cycling.
- Progesterone levels need to be measured to ascertain whether a mare is actually cycling and this blood sample would have to be sent to UK for analysis.

Determination of pregnancy:

- There are three main ways of determining if your mare is indeed pregnant.
- A basic 'in-house' blood test that must be run between 40-120 days after mating.
- Rectal examination from day 60 onwards. Bear in mind vets will only do this if there are decent facilities, tame horses and a good way to prevent them being kicked in the stomach!
- Or just wait and see. If it is still the main breeding season you will see her return to oestrus if she is not pregnant. You will see no signs of further heat and a slowly expanding abdomen if she is!

Foaling:

- Ensure that the mare is in a safe, clean area with good shelter. Like lambs, foals need to be warm and dry to survive after birth.
- Mares tend to seek isolation to foal so ensure there is no way that many other horses, or strange horses, can bother her or her foal.
- Most foals are born from 11pm to 3am.
- Foaling is normally rapid and straightforward.
- Be aware however that if complications occur they are often severe and need quick intervention.
- Performing caesareans on horses is highly risky and sadly, unlikely to result in a successful outcome.
- So, while supervising your mare foaling is a good idea, it is very important not to interfere with the natural course of things. Human intervention will stress your mare more and may delay the natural delivery of your foal.
- The following table summarises the main signs to watch out for to anticipate foaling occurring.
- You can also use aids such as foaling alarms and test kits that you perform on her milk to predict when foaling is occurring/going to occur.

Signs of approaching parturition in the mare:

SIGNS	TIME BEFORE FOALING
Distended udder	2-4 weeks
Shrinking of buttocks near head of tail and drooping of abdomen (more obvious as horse ages)	1-3 weeks
Filling out of the teats	4-6 days
End of nipples covered with a wax-like material	1-4 days
Loose vulva and drops of milk seen at teats	½ - 1 day
Restless, pacing, seeking isolation, sweating, frequent urination, lying down and getting up. It is very important to leave the mare alone to do this as it helps the foal get in the right position for birth.	2-3 hrs
Ruptured membranes and lots of fluids expelled	30-60 minutes
Visible labour begins	15-30 minutes
Afterbirth expelled	15-120 minutes after foaling

The process of foaling

- Uterine contractions force the placenta (what



Mare and foal at Main Point

becomes the afterbirth) forward through the cervix and this may be seen protruding from the vulva.

- Following the rupture of the placental membranes gallons of amniotic fluid will be released and then the mare may rest for 10-15 minutes before actual labour begins.
- Mares usually lie down during strong contractions but some may foal standing.
- The white, shiny amniotic sac is seen first, followed by the foals feet within the sac.
- The feet should be sole down with one foot 2-6 inches in front of the other. If only one foot is seen one of the foals' elbows may be locked on the brim of the mares pelvis.
- The foals' nose should be lying along its front legs near its 'knees'.
- If the nose is not lying along the legs its neck may be flexed back.
- If the presentation of the foal is not normal the mare will get up and walk around which may correct the foals' position.
- Once there are 2 feet showing there should be progress within 5 minutes and the foal should be expelled in about 15 minutes.
- During foaling leave the mare well alone unless there is a marked variation away from what is described above, in which case you should call for veterinary assistance.

When the foal is delivered

- As soon as the foal is born ensure the amniotic sac is away from its nose and mouth.
- If the foal is not breathing within 30 seconds check and clear any mucus from its nostrils and mouth.
- If the foal is not breathing by 60 seconds after birth blow up one nostril while blocking off the

other nostril and mouth.

- This is normally enough to get the foal going but if it doesn't, breath for it, as above, about every 3 seconds until normal breathing has established.
- While it is important to establish if the foal is breathing and ensure the amniotic sac is clear of the foal; do not rush to assist the mare in expelling the foal as by rushing up to her and the foal you may make her get up and move away from the foal too soon which may prematurely rupture the umbilical cord and cause too much blood to be lost from the foal.
- Try to leave the umbilical cord attached for several minutes and let the mare lie and rest.
- If the foals' umbilical cord is squirting blood pinch it firmly for several minutes so the artery can constrict.
- If the umbilical cord has not ruptured naturally in about 15 minutes, find the constriction in it which is about 2 inches from the foals' abdominal wall and twist and pull here to break it.
- Soak the stump in iodine once a day for 2-3 days.
- The mare will continue to show some cramping and colicky signs while the afterbirth is expelled and her uterus continues to contract and involute.
- If the placenta has not been passed after 4 hours call for veterinary assistance. Placentas are normally expelled 30 minutes to 3 hours after foaling and risks of toxicity increase the longer it is retained.
- A normal healthy foal will be up between 15 minutes – 3 hours after foaling and trying to suckle about 20 minutes after standing.
- Do not try to get the foal up or force it to walk, this will exhaust it. Leave it alone to stumble around.
- Cleaning and drying the mare's udder before the foal suckles is a good practice.
- It may take up to 6 hours for the foal to drink but after this time it is important to take action as the ability of the foal to absorb the antibodies in the colostrum begins to decline after its first day of life.
- A foal that does not receive enough colostrum will be lacking in vitamins and antibodies that protect it from infection.
- If the foal has not passed faeces within 4-12 hours of birth an enema should be given.

IF YOU ARE IN ANY DOUBT PLEASE RING FOR VETERINARY ADVICE OR ASSISTANCE.

Recipe Spot - From GoodFood 101 Cakes & Bakes book

Toffee Brownies

Ingredients:

- 12oz dark chocolate (around 50-60% cocoa) broken into pieces
- 9oz unsalted butter cut into pieces
- 3 large eggs
- 9oz brown sugar
- 3oz plain flour
- 1 teaspoon baking powder

Method:

Preheat the oven to 160°. Grease and line a shallow 9 inch square cake tin. Melt the chocolate and butter together (either on the hob or in the microwave), then stir well and cool. Whisk the eggs until pale, then whisk in the sugar until thick and glossy. Gently fold in melted chocolate mixture, then sift in flour and baking powder, gently stirring until smooth. Pour the mixture in to the cake tin and bake for 30-35 minutes, or until firm to the touch. Cool in the tin on a wire rack for at least an hour, then cut into squares and finish cooling on the rack.

Another Cause of Lamb Losses

By Ian Campbell

Fraser McKay has pointed out that in the last Wool Press I omitted a major cause of lamb losses in the Falklands: Lambs falling into ditches and drowning.

Ditches are obviously a major risk to young, naïve lambs and represent a particularly demoralising loss because all those other issues we talked about- the vulnerability of life during the birth and early stages- have been resolved, only for it all to be lost in a ditch.

Prevention I guess is by choosing a lambing camp with lower risk ditches if at all possible, keeping in mind all the nutritional and shelter needs as well, and fencing off or digging out the highest risk ditches.

Keep the feedback coming- I might get an article right by the end of my contract.

CORRECTION

In last months' recipes, there was a mistake on Avis's Scorpions, which should also include 12 oz sugar. The recipe ingredients should now read:

- 12oz Butter/Margarine
- 12oz sugar
- 1 ¼ lb Flour
- 2 teaspoons baking powder (or self raising flour)
- Couple handful of currents
- egg optional

Sheep waltzing

By JUSTIN CASE

WITH the rest so heavily regulated by occupational health and safety rules and regulations, shearing remains the last seriously physical job in the bush where you don't have to wear a ridiculous fluorescent shirt that will apparently stop you tripping over something.

Indeed, when it comes to apparel, shearers are probably the only people outside the retirement home who still consider moccasins as going-out shoes and whose singlets are long enough that they can work bending over without offering the boss a place to park his bicycle.

Shearing remains a tiny glimpse into Australia's past because, try as they might, the advocates of "inevitable change" still haven't found a

better way of getting wool off a sheep's back - and that's after spending trillions in grower funded levies to do just that.

But at a time when most young people would rather spend their working life bent over a computer rather than a snelly, cantankerous sheep, shearer numbers are dwindling faster than wethers in a drought, and a good team can be as hard to find as a matching sock.

In fact, the situation is so bad in some areas it won't be long before we end up with a reality TV show, *The Farmer Wants A Shearer*.

They may not be "wired and dined", but the farmer at the very least would be prepared to build an air-conditioned shed to keep the shearer happy.

Still there's been a few changes - for instance, while shearers used to be happy with the radio on full bore, they now download their

favourite tracks and take their iPods to the shed. Perhaps the biggest change has been reserved for "The Shearing of the Rams". Thanks to improved breeding, rams have been getting bigger while shearers haven't.

So by union edict they now have to be sedated (the rams, that is, not the shearers) and today shearing a ram looks a lot less like a prize fight and a lot more like a slow dance with a seriously inebriated *Biggest Loser* contestant.

The true stars of the shearing game in Australia today just happen to be New Zealanders.

Kiwi teams approach the job with unrivalled proficiency and professionalism.

Their shedhands can skirt a



"Anyone up for a dan-she...?"

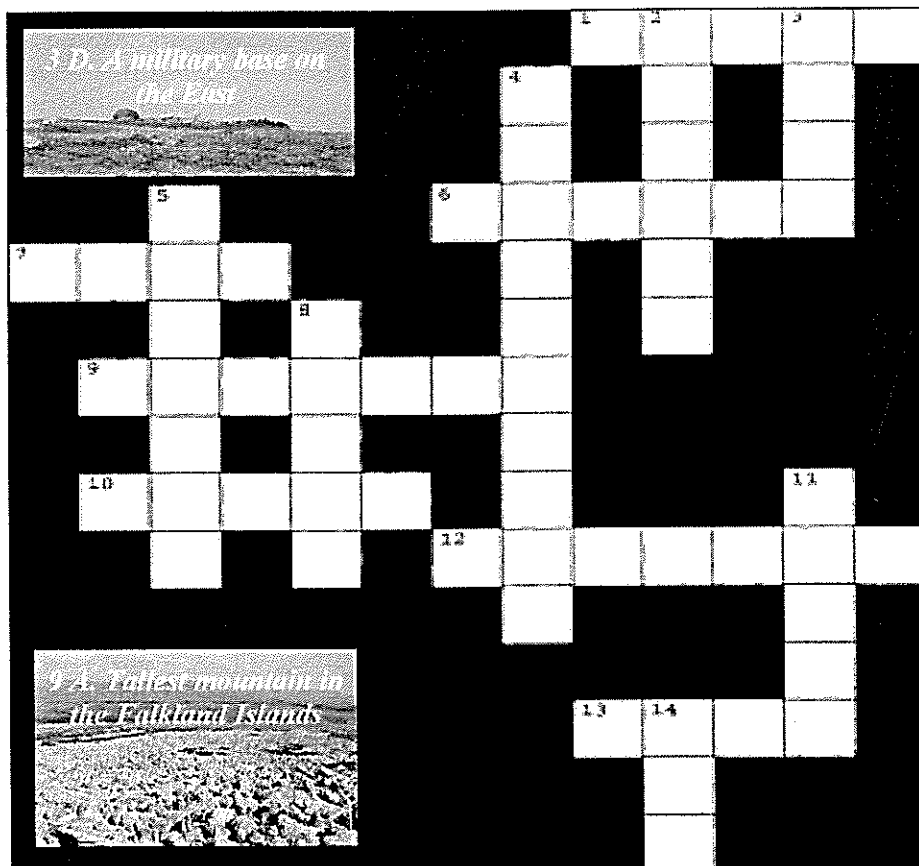
fleece before it even leaves the board, throw it on the table so it lands perfectly every time and class it with the click of their fingers.

No wonder there are so many rude jokes about them. So if you can track down a good Kiwi team, hold it close and never let it go.

And if by chance your neighbour asks, "Are you shearing?", you'll just have to answer, "Sorry mate, they're mine and I'm not shearing them with anybody."

PUZZLE PAGE

Crossword



All the clues are to do with mountains in the Falkland Islands

Across:

1. Morning and afternoon tea
6. An Easter animal
7. Item of outdoor clothing
10. Opposite of old
12. Located on the third largest island
13. A colour

Down:

2. Located on Pebble
4. Mountain located next to 1A
5. Located on Saunders
8. Another word for circular
11. A military base on the West
14. Located on the Murrell Farm

DingBat Brain Games

Flex your brain, free your mind and think laterally

PROMISE

HAT

Sudoku

Each Sudoku has a unique solution that can be reached logically without guessing. Enter digits from 1 to 9 into the blank spaces. Every row must contain one of each digit. So must every column, as must every 3x3 square.

Hint:

Describing out loud what you see may give you the clue you need!!

1	2		8		6		9	4
6	7			9			2	3
3				7				6
	4		3		1		8	
8				4				1
4	5			8			1	7
2	8		7		5		4	9

Last Month's Solutions

3 6 9 | 7 4 8 | 1 5 2
5 2 1 | 3 6 9 | 4 7 8
7 4 8 | 1 5 2 | 6 9 3

4 5 7 | 2 1 6 | 3 8 9
9 1 3 | 8 7 5 | 2 4 6
2 8 6 | 9 3 4 | 5 1 7

1 9 5 | 6 2 7 | 8 3 4
6 7 4 | 5 8 3 | 9 2 1
8 3 2 | 4 9 1 | 7 6 5

P I L C R E P A P H + + P N C
+ A + + R C S + C + C + R E O
E + P A P T R N + A + E I P M
+ P S E A O U A L + L + T R P
C E A P R P S C Y A + L T E A
R A L T E F U T S O I + S K S
+ E T L O L A T I C N + T R S
R + O E A L I S N T + S I A +
+ H + T U C L E T + N + C H +
+ + O + B L P E + E + O K + +
+ R + A + + B + C + N + T + +
P E N C I L S H A R P E N E R
+ D F B L T T I P S + + R + S
S R E T H G I L H G I H + S +
+ + + B A L L P O I N T P E N

talk

SOULS

Small Talk

Left Overs

Brainteaser
MEAN, MANE, AMEN
and NAME

Brainteaser

Assign every letter of the alphabet its numerical value: A=1, B=2, C=3, and so on, up to Z=26. Can you find a 6 letter word which has a total over 115? For example WIZARD = 23 + 9 + 26 + 1 + 18 + 4 = 81.

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Telephone +500 27355

Fax +500 27352

sferguson@doa.gov.fk

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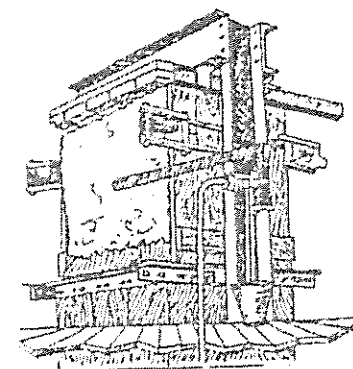
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Plus all the usual features and more!



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EDITORIAL

It's official! Anyone in the Falklands during the last month will know that it has been a pretty desperate month weather wise. The statistics from the Met Office at MPA confirm that it has been the coldest and wettest November since their records began. Continuing with the statistical theme in this edition of the Wool Press, Ian highlights the fact that the Falklands lead the world on organic land area which is good news. Andy presents data on soil moisture and in terms of big statistics there is little to beat Keith's profile of Goose Green and Walker Creek.

A full account of the Saladero Open Day is provided by Tony. The programme for the day was organised by the Department of Agriculture together with Brian and Diana at Saladero, and demonstrated a number of projects. The weather was not the kindest, and that was particularly so for visitors from the West.

Two complementary activities address aspects of growth and nutrition. First up is Ian focusing on sheep although the issues discussed have wider relevance. This is followed by Mac on beef. Both discuss factors which can improve the bottom line.

Last but not least animal health issues are dealt with by Zoë providing further information on rickets, and Tony discussing worm control. Zoë's article raises the issue of the potential impact of what may be, or become, limiting nutrients and minerals. Nutrient budgets have been discussed previously in the Wool Press with analysis of the quantities of nutrients exported in wool and meat. There has been some renewed discussion recently, on whether the fish and processing waste discarded from the fishery could be converted to fishmeal, and used as a source of local fertilizer. There are significant logistical and other hurdles but there are some developments that may make it worth revisiting this issue in due course (and yes I was striving for a link between agriculture and fisheries).

As 2009 draws to an end we wait to see what will make the headlines in 2010; oil, fisheries, agriculture or transport and communications. Whatever it is, hopefully, it will be for the right reasons.

Best wishes for Christmas and the New Year from all at the Department of Agriculture.

John Barton
Director of Natural Resources



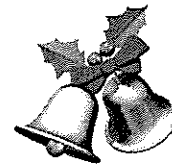
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CHEWING THE FAT ON RESILIENCE



By Ian Campbell

Resilience: *noun*; ability to recover easily or quickly from a misfortune or illness.

I love this word, and believe in the concept. I have mentioned the word resilience in relation to lamb survival and hogget survival in several articles in the Wool Press lately, and also the EDS and other related papers. Maybe I need to explain myself.

As I am writing this we are experiencing the worst November weather on record I believe, and the sheep chill is 106. Any new born lamb or freshly shorn sheep is in grave danger on a day like this and I admit there is nothing that could have feasibly been done or foreseen. Weather like this, and for as long as this, and coming when it does in the annual pasture cycle makes it particularly tough.

What I am really referring to when I talk of resilience is the ability of a hogget to survive a normal long winter. The normal loss of hoggets in winter is around 20% each year. I think it is due to the cumulative effects of grazing pastures with no fresh growth, surviving repeated periods of cold weather while still trying to grow (because that's what any prepubescent animal does).

I see it as mostly coming down to fat. Fat is nature's energy reserve that goes on when excess energy is eaten and comes off when more energy is required. It's a simple energy balance but let's try stacking a few figures on it.

A kg of fat can create about 45 MJ of energy but will only release about 30 MJ when utilized. In that sense it is an inefficient system.

Maintenance requirements: Known as M. M is defined as the intake of energy where there is no weight change - what the animal eats in a day - it uses in a day. M for a fully grown wether is about 7.5 MJ/day. If an animal eats more than this it puts it into fat and if it eats less it burns up some fat.



An adult wether eating 9 MJ/day for a month will put on 1 kg of fat but will put on more weight than this with the water also in the fat tissue. If it is eating only 6.5 MJ/day it will lose 1 kg of fat (and a bit more weight).

M for Growth: Growth in young animals is a systematic thing. The bones grow, the muscles grow to fit the bones, then the fat comes to cover the muscles. This obviously has implications in carcase composition for a meat processor - but also for the animal. Light but growing animals are by their intrinsic nature very lean, and if underfed will be leaner still because nature is forcing growth and the last thing it is putting on is fat. A twenty kilogram hogget has less than 1 kg of fat. An extra 5 or 6 kg in weight though will more than double this amount of fat. Fuel for twice as long!

Weight Loss: The more fat an animal has the longer it can sustain a period of weight loss. Once the fat is all gone the animal's will to live keeps on; and it uses protein. Not as energy dense but energy none the less. Post mortems on animals that have died due to malnutrition show no fat - and depleted and wasted everything. You can see through the gut walls and so on.

Depending on the type of animal there are also other things that particular animal can do. Pregnant animals will produce smaller offspring. Lactating animals will produce less milk. Young animals will grow slower and so on.

The Goal: Is to put as much growth onto animals as you can; when you can. This means actively managing the animals; maybe putting in a fodder crop, paying attention to weaning and worm control, getting on top of the grazing management process and so on. I am talking here about the summer previous to the winter losses.

Losses due to a cold spell in September have their roots in February lamb management or even in spring pregnant ewe management.

Back to Resilience: Resilience is therefore about having more fat reserves to last longer before other body tissues are used in an attempt to postpone the inevitable. It is also about ewes producing bigger lambs and more milk to make their lambs more resilient.

How is it done? Better nutrition and health management. The FIP scheme has been funding pasture improvement works to provide strategic feeding of animals to improve their resilience. We don't fund unless it shows a 3:1 payback and we are convinced it does.

Worms, if left unchecked, will reduce the weights by several kg over a season (or worse) so monitoring and treating these is also a good investment. We also fund sheep

worm testing. I have made my feelings about earlier weaning known (Dec 2008) and have had some positive feedback from a couple of people now who have tried it.

If we don't do something. Quite frankly the flock size on the Falkland Islands is diminishing because of low lambing percentages and high hogget mortality. Maybe the old sheep were more resilient; from the old photographs they seem huge, with buckets of wool. The sheep may have changed but they did have to because nobody wants to pay much for 28 and 30 micron wools.

Maybe the way we do things might need to change as well.



RELAXATION OF IMPORT PROTOCOLS FOR LISTED FRUITS

By Shona Strange

Biosecurity is essential but restrictive. Risk analysis is a process by which decisions can be made as to whether certain biosecurity measures may be relaxed. In May/June 09 a Biosecurity Consultant, Dr Robert Ikin, carried out a pest risk analysis on importation of certain fruits. Following consultation with the Agricultural Advisory Committee the following was approved:

AS FROM 04 JANUARY 2010

Under personal imports you may import any of the following fruits from the UK and Chile:

- Bananas
- Apples
- Pears
- Kiwifruit
- Grapes
- Stone fruits (pear/plum/apricot/nectarine)
- Citrus (orange/grapefruit/lemon/lime/tangerine)

Without the requirement for:

- An import permit
- A phytosanitary certificate

But

the following criteria must be met:

- Must be purchased from UK or Chile
- Max of 5 kilos total
- For personal consumption only
- Declare on arrival
- Be free of other organic matter

And will be

Subject to inspection and will be confiscated if above criteria not met.

Anyone interested in reading the report may contact me at the Department of Agriculture on phone 27355 or ssstrange@doa.gov.fk and a copy will be sent to you electronically.



FALKLAND ISLANDS LEADS THE WORLD



By Ian Campbell

Each year there is an international survey of organic farming in the world and for the last 12 years Lichtenstein has led the world with 30% of its farmland certified organic.

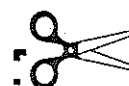
But this year the Falklands leads with a massive 36% either fully organic or in conversion. The reality is we have always been at least that organic or more so. In order to make the claim though - in this case on a wool product - the production system, it has to be certified and independently audited.

The first fully certified organic Falkland wool should be hitting the markets this season and we are all anxiously awaiting the sale figures to see if it is "worth the hassle".

So the system can be assessed it has to run to a set of standards. Rather than developing our own and having the enormous expense of getting international acceptance of these, we have an agreement with the Australian Certified Organics - ACO to use their standards. They are the most appropriate because Australian conditions of extensive animal grazing are far closer to the way we do things here than say the UK would be.

The Department of Agriculture first established links with the ACO in late 2007 and there are accredited auditors and an advisor within the current DoA team.

Currently there are 9 farms in the system, however this includes the biggest farms on the Falkland Islands and so accounts for a large land area.



DOG DOSING DATES FOR 2010/2011

Date	Drug	Comments
27 th January 2010	Drontal	
10 th March 2010	Droncit	
22 nd April 2010	Droncit	Thursday – to avoid public holiday
2 nd June 2010	Droncit	
14 th July 2010	Drontal	
25 th August 2010	Droncit	
6 th October 2010	Droncit	
17 th November 2010	Droncit	
22 nd December 2010	Droncit	One week early to avoid Christmas holidays
2 nd February 2011	Drontal	



Please remember to contact the Veterinary Service on telephone number 27366, fax 27352 or email imports@doa.gov.fk and advise when your dogs have been dosed.

Thank you for your assistance.

EFFECTIVE USE OF SOIL MOISTURE - DO WE VALUE IT OR NOT?

By Andrew Pollard

There are many factors that will influence the establishment of a crop or pasture. Ineffective use of the soil moisture available is, in my opinion, one of the biggest contributors to crop and pasture failure.

Soil moisture levels are influenced by factors such as: rainfall, temperature, increased hours of sunlight, wind strength and the physical attributes of the site such as aspect and soil depth.

The Department of Agriculture currently has four weather stations located around the Islands (Elephant Beach, Blue Beach, Coast Ridge and Shallow Harbour). The chart below shows the difference in soil moisture at EBF over two spring/early summers.

Soil moisture at EBF in the 2007/08 season was more favourable for establishing crops and pasture than in the 2008/09 season. This

difference makes it difficult to have a calendar date for sowing crops and pasture.

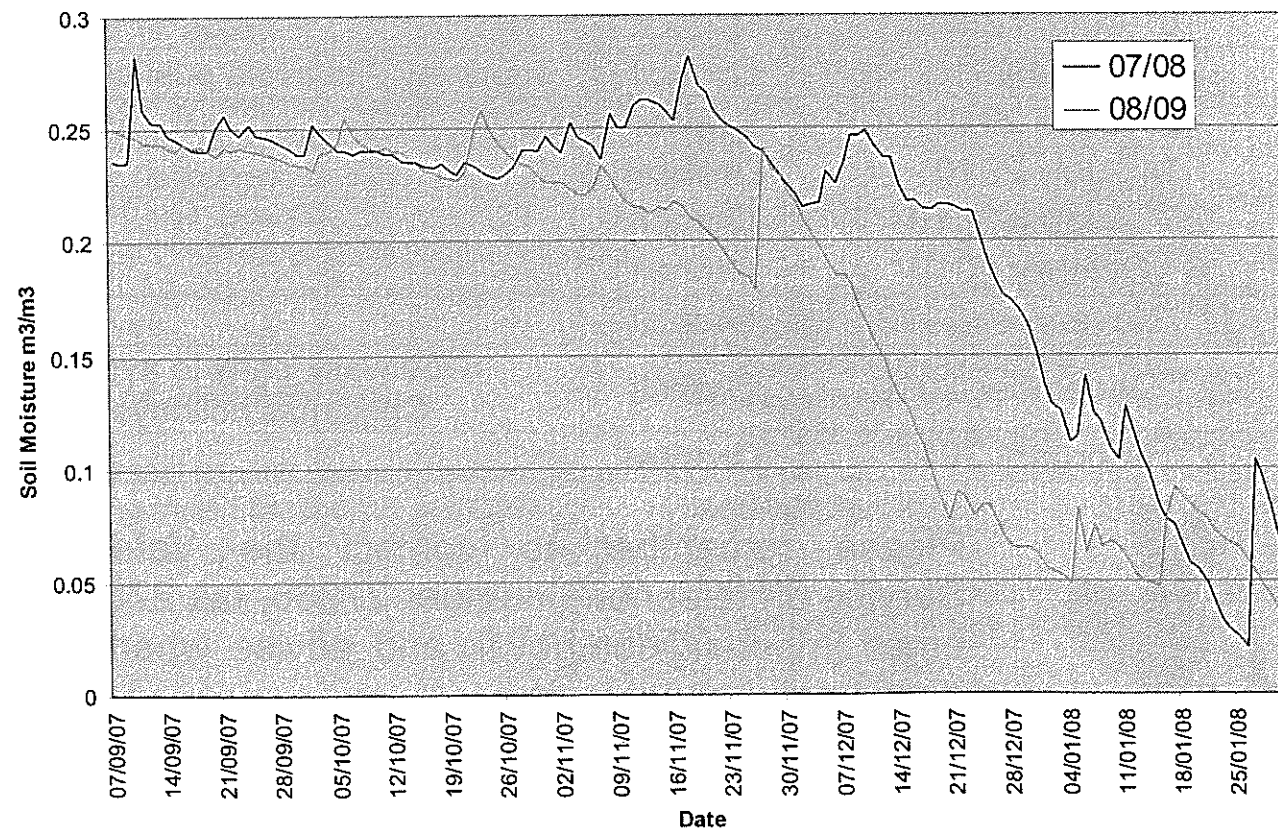
Whilst we cannot influence rainfall, decrease summer sunlight or temperature effects (which are also essential for growth, the problem we are facing currently) there are still some issues that are in our control.

I am becoming increasingly of the opinion that this is the best practice management that we can adapt in the Islands;

Year 1

The initial cultivation due to surface trash and below ground root matter cannot be avoided (leads to poor seed to soil contact and will tie up valuable nitrogen). However, it must be completed in a manner that will allow it to be burnt off as early as possible in the spring. If you are serious about cropping, virtually all other jobs should be dropped to complete this task.

Soil Moisture - Elephant Beach Farm



Once burnt there should be no need to cultivate the soil again to prepare a seedbed. Direct drills are more favourable as they create minimum soil disturbance which results in little soil moisture loss when compared to harrowing (the Einboch is essentially a set of harrows). Direct drills also have the advantage of managing seed depth and phosphorus fertiliser placement next to the seed.

Once the area has been burnt I would then encourage the sowing of a cereal for two main reasons:

1. The season is starting to move on and it may be pushing it to establish winter brassicas that have a long growing season (remembering the burn, in all likelihood, will reduce soil moisture).
2. Cereals have larger seeds and can be drilled deeper than small seeds. This is important as you can get under the ash that is not a stable environment for a seedling to be established in. Have you ever had seed germinate and then lose all the seedlings in a gale?

Not using nitrogen fertiliser (once emerged) will lead to slower establishment and ground cover. Increased ground cover will reduce soil moisture loss from direct sunlight and wind (evaporation).

Subsequent years

After grazing the oats, a firm seedbed should be left behind. As brassicas favour a firm seedbed, and we know that cultivation will dry the soil out, the question has to be asked, why cultivate?

The exception to this may be if weeds such as sheep's sorrel or volunteer grasses have established. Competition from weeds during establishment is another one of the biggest contributors to failure in my opinion. The use of herbicide alternatively can prevent the need to cultivate and preserve soil moisture. The use of herbicide is a stumbling block for many farmers (be cautious, I agree, but some chemicals are not residual and become inert once they hit the soil surface). I often find it ironic that some of the people I talk to are passionately against herbicide but are more than happy to pour drench down their sheep's throats!

Fact - The Falkland Islands has declining soil moisture throughout most springs and peaks at its lowest in mid-summer.

Whilst we cannot physically alter this, ask yourself - **is my current regime preserving or increasing soil moisture loss?**

I have no doubt that addressing this issue will prevent many establishment failures.

Not sure what to put in that Christmas or birthday present?

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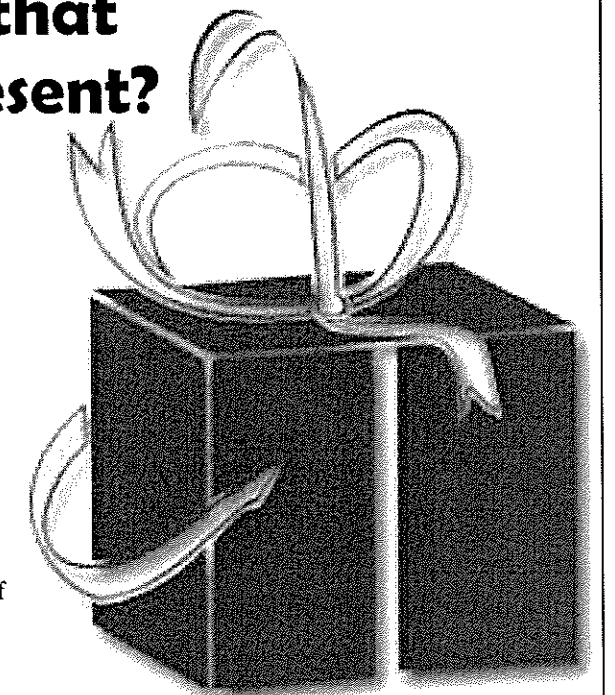
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SALADERO OPEN DAY

By Tony Mills

The Saladero open day held on Saturday 21st November was a great opportunity to showcase some of the work and animals produced by the Department of Agriculture (DoA).

While it is always good to have members of the farming community attend these days, the programme was set out to also give Stanley residents and those previously involved in agriculture the opportunity to catch up with the type of work carried out by the DoA. This opportunity was taken up by both groups with around 100 visitors for the day. The weather wasn't the kindest the Falkland Islands can offer however, this didn't deter those who wanted to have a look around Saladero and their persistence was paid off with a fine BBQ prepared and cooked by members of the DoA.

The day started out at the cattle yards with a chance to view some of the animals from the National Beef Herd (NBH). The key aim of the NBH is to make genetically superior beef bulls available for farmers to buy or lease. There is also the possibility of purchasing surplus female breeding stock. A secondary aim is as a research herd to investigate issues of nutritional anoestrous and low fertility as experienced in many herds across the Islands and develop grazing management strategies for improved internal parasite control of both cattle and sheep.

It was highlighted that the NBH has come a long way from its original beginnings to where it is today. Today the NBH is a pedigree and performance recorded herd. The key traits that are recorded are designed to put money in your back pocket and include 200 day (weaning



Vehicles gather by the shed and cattle yards

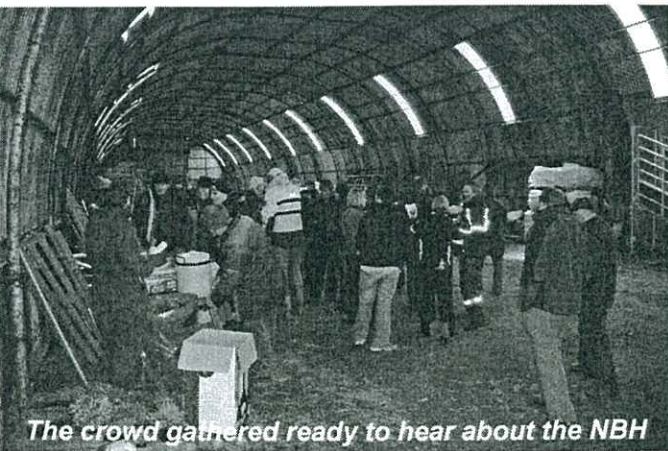
weight) indicating a cow's ability to produce milk, 400 day (yearling weight) indicating the inherent ability of a beast to grow and fatten and scrotal circumference (SC) with big being best as an indicator of fertility in bulls and is highly linked to the age of puberty and fertility of their daughters.

Unfortunately, the one hiccup for the day involved the generator and the ultrasound machine - which can be used to measure fat thickness, eye muscle depth and area on the live animal. The ultrasound was on display and a brief explanation was given on how it can be used. The ultrasound does look a little bit like a small TV and a passing comment was made that the blank screen looked very much like camp TV!!

The second section of the day was a chance to look at the various improved pastures that were being developed and used by the DoA. Andy Pollard took the opportunity to give everyone an update on the key principles of managed grazing and then it was into the vehicles for a guided tour of the improved and native pastures at Saladero. With detailed notes and the expectation of the possibility of getting bogged



Inspecting NBH Angus bulls



The crowd gathered ready to hear about the NBH

SATURDAY 21ST NOVEMBER 2009



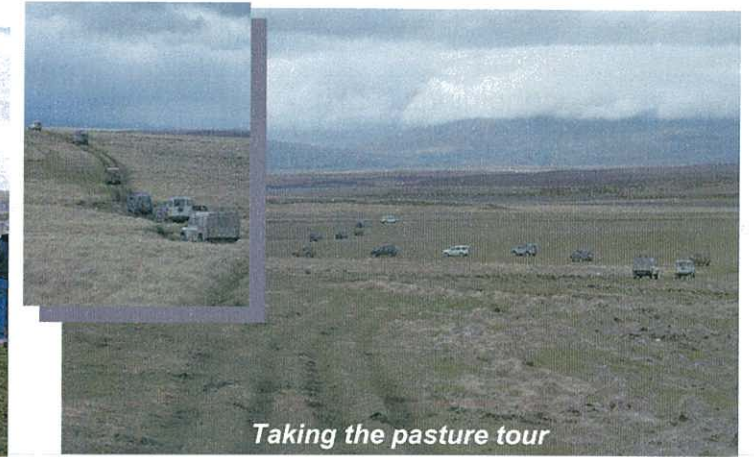
Visitors at the cattle yards

the intrepid explorers set off on their jolly. The path set out by Andy and Brian Aldridge gave everyone a good opportunity to view the contrast between native pastures and improved pastures and the important role they both play in the production capacity of Falkland Island farms. It would have to be said that Andy and Brian set out an excellent path and it has also provided the opportunity for a second inspection when the growing season finally breaks the shackles of the extended winter we are having. Thankfully no egos were bruised with an unexpected bogging and the tractor remained in its shed.

The drive was well designed to deliver everyone down to the shearing shed where a well earned feast and hot coffee or tea was awaiting the visitors. This was also the venue for the DoA to give an overview of the National Stud Flock (NSF), the last highlight of the day. An overview was given of the aims of the NSF and how this, like the NBH, is a pedigree and performance recorded flock. The current key production traits monitored and used for selection are fibre diameter (MFD), bodyweight (BWT) and greasy and clean fleece weight (GFW & CFW). A new measure relating to internal parasite resistance



A quick break and barbecue lunch



Taking the pasture tour

based on faecal egg counts (FEC) is also being used and was introduced at last year's ram sale. This year all the sale rams will have scrotal circumference measured given its strong relationship with fertility.

Breeding and breeds always provide a good discussion point and this was no exception. The NSF is at an interesting point in its development given the diminishing numbers of Polwarths world wide. It was generally agreed that the future of the NSF requires careful review and this is currently being progressed.

The new Director of Natural Resources, John Barton, was on hand to close the day and thanked everyone for attending and making it the success that it was. While this was a specific open day the DoA encourages you all to contact Brian at Saladero or the DoA in Stanley if you would like to take a look at the animals or pastures at Saladero. We will also keep you informed of a future date when we will go back and have a look over the improved pastures.

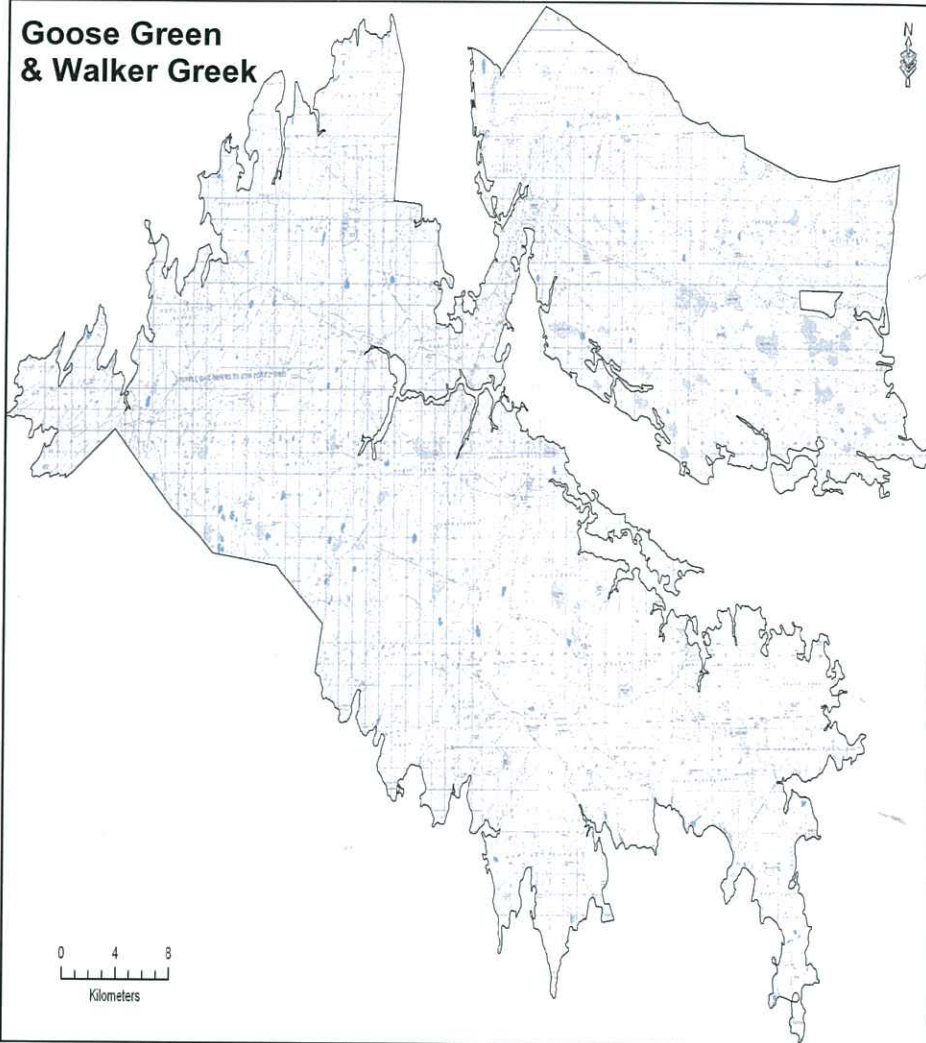
Thank you again for taking the time to attend our open day and we look forward to hearing from you or seeing you next time.



The NSF ram hoggets on display

FARM IN PROFILE: GOOSE GREEN

Manager: Keith Alazia
Owners: Falkland Landholdings (FLH)
Farm Name: Goose Green & Walker Creek
Farm Size: 152, 807 (ha)
Number of sheep: 82,633
Number of cattle: 585



Keith and his partner, Glynis, have lived at Goose Green for seven years. Keith has worked for six years as assistant manager and for one year as manager. Having only been in the job a short while, Keith is still learning, which means that little has changed within the farm so far. Their main aim initially is to keep the current number of stock in good condition, and to make any alterations deemed necessary at a later stage.

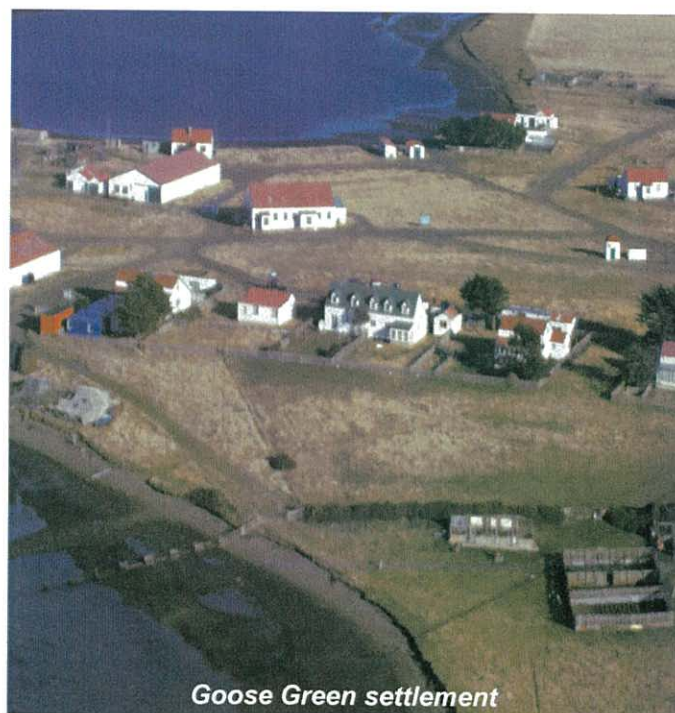
Keith and Glynis believe that farming in the Falkland Islands is changing, mainly because the abattoir provides another option to farmers.

Other staff members at Goose Green comprise of; Gilberto Castro who is the assistant manager and who has worked there for nine years, Gerald Morrison is the longest serving worker on the farm, having worked there for twenty eight years and Chris Taylor who has been there for twenty four years.



One week old SAMM Lambs with Kia

In addition to the above, Goose Green has a handyman, a mechanic, a youth on the training scheme, four full time shepherds, one



Goose Green settlement

FARM IN PROFILE: GOOSE GREEN

part time shepherd, one navy and one tractor driver. At Walker Creek there is now just Lenny Clifton, the assistant manager, and two shepherds.

Sheep

The type of sheep that FLH are trying to produce at Goose Green/Walker Creek are Polwarths for their wool and SAMMs, with their bigger frame, for the abattoir.

Most of the sheep at Goose Green/Walker Creek are bred for their wool, however, they also try to send as many animals as they can to the abattoir. This season, Keith and Glynis will be sending lambs, old season lambs (OSL) and mutton to the abattoir. Oats will be planted to provide additional feed for the lambs. This extra feed will help the lambs achieve the weights required for the abattoir.

Goose Green is involved in the SAMM joint venture with the Department of Agriculture (DoA). They took this on to boost up the frame size of their flock which had been reduced due to the use of Cormo rams.

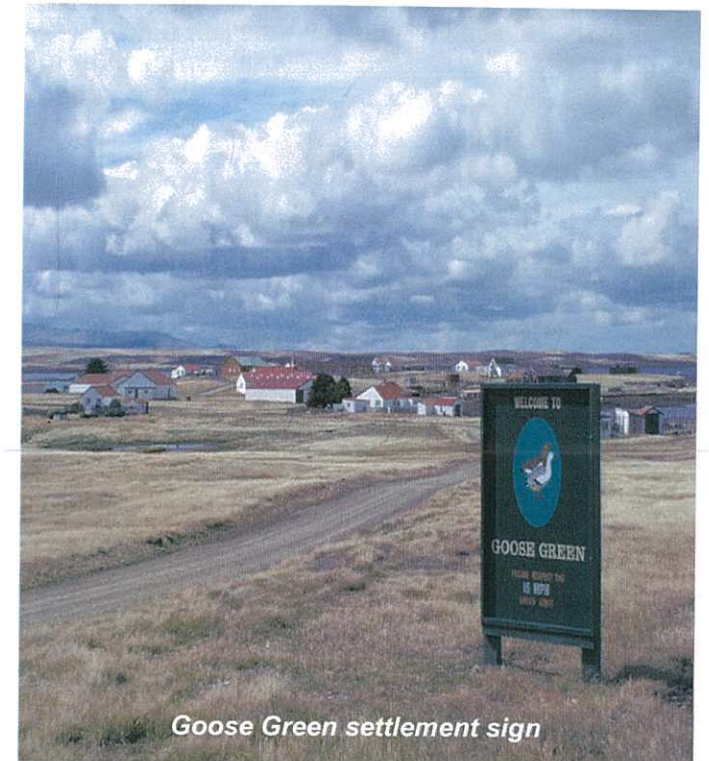
In five to ten years time Keith and Glynis will be dropping their wether numbers and running more ewes to increase the number of lambs so they can increase their supply of OSL and lambs to the abattoir.

Keith and Glynis believe that at this stage they shouldn't have to change their type of animals over the next ten years, because they can still sell their wool bred sheep to the abattoir.

Cattle

Goose Green/Walker Creek run 585 cattle, mainly of Angus breed, but they are planning to reduce their numbers over the next few years to a more manageable herd size.

Keith and Glynis's cattle breeding objective is to supply the abattoir with as many cattle per year as they can. They have seventeen cattle on a tussac island at the moment to fatten them up, as there is no cost (apart from transporting the animals on and off the island) and if this works well they are keen to carry this on.



Goose Green settlement sign

Organics and other enterprises

Keith and Glynis are in the process of converting to organic, and are now into their second year.

They believe that a good team of employees (which they have) is important to the running of the farm, and also see the importance of maintaining a family community. Goose Green has a full time school, a store, a social club and James and Trudi Lee's business, the Galley Café.

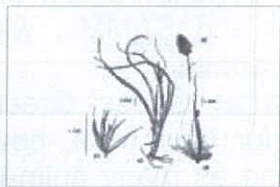


One week old SAMM Lambs

FALKLAND ISLANDS PLANT PASTURE GUIDE

The Department of Agriculture now has available copies of the Falkland Islands Pasture Plant Guide.

If you would like a copy, then please contact Andy Pollard on 27355 or email apollard@doa.gov.fk



Falkland Islands Pasture Plant Guide

In recent years farmers in the Falkland Islands have been improving the quality of their pastures by sowing introduced species or by rotationally grazing native pasture.

This guide aims to help them evaluate the progress of their pasture improvement either through monitoring the contribution made by the sown species or assessing the directional change in species composition associated with rotational grazing.

We hope this guide will also be of use to those generally interested in plants in the Islands.

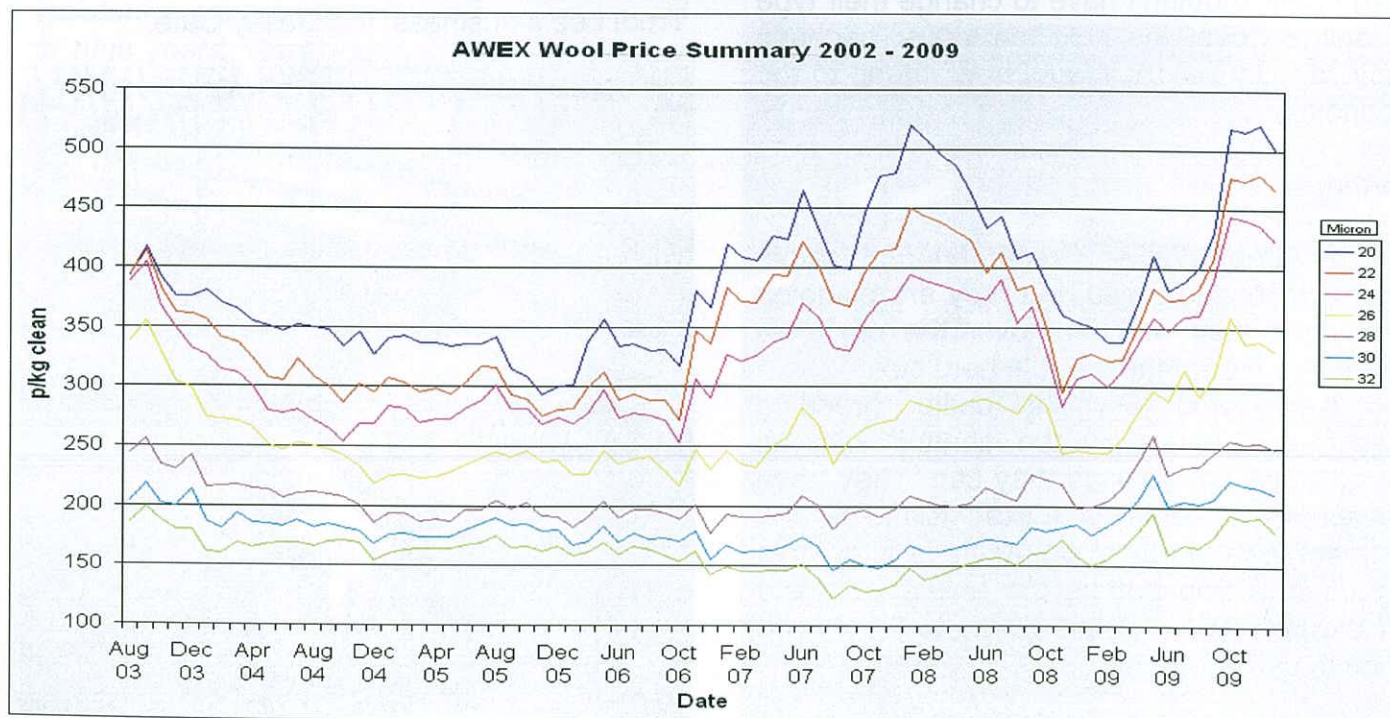
Falkland Islands Pasture Plant Guide

Jim McAdam and Rodrigo Olave

WOOL PRICE TREND OVER TIME

Based on weekly DoA Wool Reports

AWEX Wool Price Summary 2002 - 2009



FASTER, FATTER, FULFILLING FINANCIAL FEASIBILITY

By Mac McArthur

The F words that constitute the title of this article are all positive words that are potentially in reach of all Falkland Islands farmers who recognise that breeding genetically superior cattle can be fulfilling both financially and personally.

Earlier Finishing

I was reading recently that the Lawson Angus herd in Australia has reduced the age that their young cattle are finished by 1 year relative to the situation in that herd 20 years ago. This has occurred mainly through performance and progeny testing of the herd and the introduction of superior genes from around the world for milk production (of cows), growth rate, carcass characteristics and early maturity (ability to fatten at young ages). Semen from 3 bulls in this herd will be inseminated into the National Beef Herd (NBH) cows this coming joining.

Improved Feed Conversion

Lawson Angus also have also reduced the feed conversion ratio for their cattle from 8 to 1 down to 4 to 1, meaning that for every 4 kg of food consumed on average by young cattle they are putting on 1 kg of weight. The broiler chicken industry has a conversion ratio of 2-3 to 1 which is considered to be very efficient so it is interesting to see a cattle herd coming close to this.

Faster Growing and Finishing Cattle

Despite the dreadful winter and spring we have experienced this year, I have seen, or been aware of, young cattle from 3 herds that have been able to fatten cattle to 5mm or better on the 10th rib and readily meet the FIMCo specification for premium young beef. As the old adage says 'most of the breeding is in the feeding' and these cattle have been finished either on high quality reseeds or tussac. Whereas many people struggle to get cattle finished at this time of year, these finished cattle as well as having high quality nutrition are genetically superior to many beef cattle on the Islands, being predominantly Angus from bloodlines that grow and fatten well at young ages.

One farm that I visited recently was sending in the last few of its 2 year old steers. The faster growing and finishing steers in this mob had

been sent to FIMCo progressively with the best of them meeting the FIMCo premium young cattle grade well before they were 2 year old (20 to 21 months old).

Sources of Faster Finishing Cattle Genes

Two of these three herds have cattle either tracing back to the NBH or the Te Mania embryo transfer (ET) bull Mr T. The third herd has been using Wai Group semen from a very successful Angus group breeding scheme in the Wairapa in New Zealand. The NBH herd also has a Te Mania ET bull and a number of his bull and heifer progeny. You will need to be quick but there are a small number of bulls carrying fast growing and early maturing genes, available to be leased during the main Falklands cattle breeding season. Alternatively these bulls are for sale.

Nutrition Main Limiting Factor

With nutrition being the major limiting factor in young beef production in the Falklands, a simple feed budget calculation comparing finishing a steer around 2 year old, particularly in the premium FIMCo price grid during October and November, against a 3 year old or older animal doesn't stack up for the latter. With swedes, high quality reseeds and even tussac fattening all have a cost per kg of feed produced or management costs to get cattle on and off islands and ensure the tussac grazing is carefully managed to ensure its long term sustainability.

Wasting valuable feed on cattle that do not have the genes to grow fast and fatten fast is not a financially sound practice, particularly as the NBH and other herds have these genes in hardy, quiet, polled bulls and females that are available for lease or sale.

As one farmer said recently, for him farming needs to be financially fulfilling and personally challenging - just ranching doesn't do it for him. Leasing bulls is financially feasible for most farms when the cost is £12 per calf and you don't have to fence, manage and graze your bulls away from females for the rest of the year.

Think about it. You could also be fattening your cattle faster and could feasibly have a more financially fulfilling and personally challenging future farming in the Falklands if you start introducing superior genes into your cattle whatever breed or crossbreed they are.

RICKETS - PART TWO

By Zoë Luxton

What do we know about these levels in the Falklands?

In 1969 King analysed soil and herbage samples and concluded that calcium and phosphorus were the most serious deficiencies in the diets of FI sheep. However, after an extensive survey in 1971, Davies et al. saw no evidence of disease due to deficiencies of calcium, phosphorus or magnesium. Over time there have been several isolated incidents reported of bone fragility and poor bone formation.

Whitley reported the fact that calcium is typically deficient in acid soils, thus much of the ground in the Falklands will have low calcium levels. He found that high calcium values were recorded from ground at a penguin rookery and a paddock where shells had been spread some years before and around a pile of old cow carcasses. He noted that native bushes appeared to have higher average levels of calcium than white grass.

Whitley felt that there were no obvious signs that animals grazing on low calcium pasture had calcium deficiencies and it was likely that there needed to be concurrent factors (e.g. low phosphorus and vitamin D) for the clinical signs of rickets to appear. Whitley saw no clinical cases of rickets during his time here. That of course does not mean that they didn't exist! He pointed out however, that pasture levels of calcium are likely to be low, and sheep restricted to grazing improved and reseeded pastures should be carefully monitored, especially if they are young, growing animals. They should have some access to native pasture and bushes – this is like the recommendation for cobalt supply as we discussed in the last article.

Sean Miller's work in 2003 showed that the vitamin D, phosphorus and calcium intake of sheep varied during the year, generally being lowest over autumn/winter which you would expect. Phosphorus was found to be below recommended maintenance level for weaners and shearlings during winter and spring. He saw no obvious clinical signs of a widespread phosphorus deficiency but pointed out that low phosphorus levels in an

animal can decrease food intake and further studies are warranted to draw firm conclusions. He found that calcium intake did not appear to fall below the maintenance level required in sheep and calcium availability in summer was not a limiting factor for weaner growth. Plasma concentrations of vitamin D were shown to be low between March and October which is consistent with other vitamin D studies from similar northern latitudes to our southerly one. He postulates that the syndrome of most importance in the Falklands may be the hypophosphataemia (low body phosphorus) that develops as a result of vitamin D deficiency, low phosphorus intake and the negative effects that low phosphorus confers on feed intake, nutrient utilisation and reproduction. Hypocalcaemia occurs in the latter stages of a vitamin D deficiency typically some months after the onset of the hypophosphataemia (Radostits et al 2000). An apparent hypocalcaemia syndrome has been noted in the Falklands, seen as weakness and paralysis of sheep that is triggered by increased movement of the sheep as summer begins. This can be explained by the fact that the increased calcium demand from increased activity of the sheep cannot be met by the hormonal system as there is not enough vitamin D to facilitate calcium absorption.

More recently, soil samples from all over the Islands that were sent to Hill Laboratories in NZ showed that 40/58 samples had low calcium levels with the remaining 18 having medium levels. 51/58 samples showed low phosphorus levels with the remaining 7 having medium levels. From forage samples also analysed oats showed a very low Ca:P ratio (0.4), most grasses had a ratio less than 1 and only some legume and herb species had around about the required 2:1 ratio for calcium and phosphorus. This backs up information read and reported on above that legumes provide a good source of calcium and phosphorus.

The lack of widespread bone disorders in the Falklands is probably linked to consumption of relatively calcium rich shrubs during autumn, winter and spring and the relative restriction of ME and crude protein

during the winter months which limits body growth rates, thus the need for calcium and phosphorus is lower during this low growth time. Faster growth rates demand greater supply of calcium and phosphorus and vitamin D is required to facilitate this. So it is worth remembering that weaners being well fed over winter will be growing faster and will require more minerals. It is also worth remembering that while shrubs are not particularly digestible they obviously provide some calcium and other minerals that sheep need. As grazing management techniques become more popular, the need for sheep to have some access to diverse native pasture becomes more important.

HOW CAN WE PREVENT RICKETS?

As mentioned above, diagnosing low calcium and phosphorus levels from blood tests can be tricky and as with most things, in the case of bone disorders, prevention is better than cure. From what is known about calcium, phosphorus and vitamin D in forages and, supported by Millers work there are a few measures to be recommended to protect your sheep from developing bone disorders:

- Remember that your growing hoggets are the sheep most likely to be affected by bone disorders.
- Ensure all sheep have a balanced forage diet over the course of the year.
- Be especially aware that fast growing hoggets on reseeded also need some access to native pasture including bushes/shrubs.

- Monitor sunlight trends so see if your sheep might be at risk from low vitamin D.
- Vitamin D can be supplemented in injection form at the start of winter. Unfortunately we can only source injectable vitamin D from New Zealand and only have a limited supply so you need to think ahead and talk to us about it if it is something you would like to think about doing. The cost of a dose for a hogget would be approximately 50p/sheep.
- You could also provide mineral licks to vulnerable flocks. Ensure instructions are followed carefully and ingredients noted.
- Ensure internal parasites are under control.
- Pasture treated with phosphorus containing fertiliser increases the phosphorus available to plants and thus to animals.
- We can test soil for calcium and phosphorus levels here which may be helpful in giving you an idea if your animals are at risk of low levels. Please chat to Andy about these last two points.

The final thing to remember is that although this is quite a detailed article, I have written it to inform and hopefully interest you, not to alarm you. Falklands ground can struggle to provide gross nutrition and microelements – fact. Low calcium and phosphorus is not a new issue but as we move more towards the necessity to run farms as thriving businesses there are perhaps more issues to consider in order to make our sheep as productive as possible.

As always, please feel free to ring and chat about the issues in this article.

SEEN ANYTHING STRANGE LATELY?!



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OR SHOOT IT**

**Call the Veterinary
Section on 27366**

ACTIVE SURVEILLANCE
IS OUR BEST DEFENCE



Or look out for an empty stocking this Christmas!

WORM CONTROL – COST OR BENEFIT

By Tony Mills

Internal parasites are an important issue in the Falkland Island sheep flocks and cattle herd. There have been numerous studies carried out in the Falkland Islands and Susan Campbell has reviewed this work and found that the majority of the studies have identified significant production benefits by utilising treatment and management methods to minimise the parasites impact.

There has been the odd piece of research that did suggest that this might not be the case however, further reviews of the work have shown flaws in the study methods. One study had the treated animals run back on the same pasture as the untreated animals and also had them being treated on a monthly basis.

This type of management is at odds with the purpose of the treatment and is not a management method we would recommend given that the majority of drenches used are short acting.

It may work for a long acting drench such as a controlled slow release capsule.

Below are some workings to give an idea of the cost and benefit of managing internal parasites in one specific scenario. The scenario used is treating your wether hogs at shearing (Oct/Nov) based on a Faecal Egg Count (FEC) that has shown the need to drench. These animals are then destined for the abattoir as Old Season Lambs (OSL) in the New Year.

Table 1 shows the underlying costs of various drenches available in the Falkland Islands. They represent the three main drench groups of Benzimidazoles (BZ - White), Levamisoles (LV - Clear) and Macrocytic Lactones (ML).

The cost per dose is based on a 30kg wether. If you do the calculations yourself you may find that the numbers may come up slightly different. This is due to rounding of the calculations to two decimal points.

Table 1. Costs and dose rates of various drenches available in FI

Product Name	Size (L)	Dose Rate (ml/Kg)	Cost	Cost per dose
Panacur SC (BZ)	5	1ml/5kg	£129.90	£0.16
Levacur SC 3% (LV)	5	2.5ml/10kg	£84.00	£0.13
Rycozole LV + Sel (LV)	20	1ml/5kg	£168.00	£0.05
Levitape Hi Mineral (LV)	10	1ml/5kg	£129.50	£0.08
	5		£72.51	£0.09
Firstmectin SE (ML)	10	1ml/4kg	£162.68	£0.12
Virbamec Oral + Sel (ML)	5	1ml/4kg	£80.88	£0.12
Virbamec Oral (ML)	20	1ml/4kg	£171.25	£0.06
Fencare Min (BZ)	20	1ml/5kg	£165.14	£0.05

Table 2 Total cost of drenching based on treating 1000 hd

Product Name	Total Drench Cost	Total Cost inc Labour	Total Cost/Hd
Panacur SC (BZ)	£155.88	£299.88	£0.30
Levacur SC 3% (LV)	£126.00	£270.00	£0.27
Rycozole LV + Sel (LV)	£50.40	£194.40	£0.19
Levitape Hi Mineral (LV)	£77.70 £87.01	£221.70 £231.01	£0.22 £0.23
Firstmectin SE (ML)	£122.01	£266.01	£0.27
Virbamec Oral + Sel (ML)	£121.32	£265.32	£0.27
Virbamec Oral (ML)	£64.22	£208.22	£0.21
Fencare Min (BZ)	£49.54	£193.54	£0.19

Table 2 outlines the cost of drenching 1000 head. The labour component of this cost assumes an hourly cost of £6.00 per hour and 8 hours per day. In this calculation I have allowed 3 days to gather, drench and return the 1000 head to the next paddock. Gathering could be carried out by one person but the drenching component allows for two people at 4 hours. This could be considered an over allowance given that it is not often that a gather just for drenching purposes is carried out. This would often be combined with other production tasks.

The total cost per head therefore is the combination of the drench cost per dose and the labour required. Again rounding of the calculations has been done.

Table 3 shows what the likely benefit would be for an extra 2.5kg of liveweight gain attributed to treating for internal parasites. The extra benefit has been converted to carcass weight (DWT) using a 40% dressing percentage. This equates to one extra kilogram of carcass

weight. The price ranges chosen reflect the likely price of a 13 kg carcass with a MLC fat score of 2 - 3 plus a change in carcass weight from 13 kg to 12kg at fat score 2. It is obvious that in this scenario sufficient financial benefit can be gained by drenching based on a FEC.

Table 4 shows the liveweight growth required to break even. The price ranges used reflect the estimated carcass weight based on a 40% dressing percentage. The lowest price that FIMCo offers for the lightest carcass they are willing to accept has also been included to allow for comparison. It is evident that this liveweight gain would easily be achieved between shearing and the beginning of the export season.

Unfortunately, we are not able to present all the effects that internal parasite control will have. Our aim is to develop this over the next few editions of the Wool Press. We always invite comment on the information presented, so if you think we have it wrong or have forgotten something please contact us.

Table 3. Summary of the benefit for an extra 2.5kg of liveweight gain.

Product Name	Total Cost/Hd	£1.50	£1.40	£1.25
Panacur SC (BZ)	£0.30	£1.50	£1.40	£1.25
Levacur SC 3%(LV)	£0.27	£1.50	£1.40	£1.25
Rycozole LV + Sel (LV)	£0.19	£1.50	£1.40	£1.25
Levitape Hi Mineral(LV)	£0.22 £0.23	£1.50 £1.50	£1.40 £1.40	£1.25 £1.25
Firstmectin SE (ML)	£0.27	£1.50	£1.40	£1.25
Virbamec Oral + Sel (ML)	£0.27	£1.50	£1.40	£1.25
Virbamec Oral (ML)	£0.21	£1.50	£1.40	£1.25
Fencare Min (BZ)	£0.19	£1.50	£1.40	£1.25

Table 4. Summary of the liveweight gain needed to break even.

Product Name	Total Cost/Hd	£1.40	£1.25	£1.15
Panacur SC (BZ)	£0.30	550g	610g	675g
Levacur SC 3% (LV)	£0.27	500g	550g	600g
Rycozole LV + Sel (LV)	£0.19	350g	390g	425g
Levitape Hi Mineral (LV)	£0.22 £0.23	400g 420g	450g 470g	500g 515g
Firstmectin SE (ML)	£0.27	500g	550g	600g
Virbamec Oral + Sel (ML)	£0.27	500g	550g	600g
Virbamec Oral (ML)	£0.21	390g	430g	475g
Fencare Min (BZ)	£0.19	350g	390g	425g

Public Holidays December 2009

- Tuesday 8th December - Battle Day
- Friday 25th December - Christmas Day
- Monday 28 December - Boxing Day
(in lieu of 26th December)
- Tuesday 29 December - Christmas Holiday
(in lieu of 27th December)
- Wednesday 30th December - Government Holiday
- Thursday 31st December - Government Holiday

Christmas Cackle



Public Holidays 2010

- New Year's Day - 1st January
- Good Friday - 2nd April
- Queen's Birthday - 21st April
- Liberation Day - Monday 14 June
- Peat Cutting Monday - 4th October
- Battle Day - 8th December
- Christmas Day - 27th December
(in lieu of 25th December)
- Boxing Day - 28th December
(in lieu of 26th December)
- Christmas Holiday - 29th December
(in lieu of 27th December)
- Government Holiday - 30th December
- Government Holiday - 31st December

West Falkland Ram & Fleece Show

When: Tuesday 29th December **Entries:** 9am - 1pm
Where: Coast Ridge Shearing Shed, Fox Bay **Judging:** 2.30pm - 4pm
Contact: Nigel Knight/Keith Knight **Prize giving:** 6pm
 Coast Ridge Farm

All times in Stanley time



Ram Classes:

- Hogget
- Shearling
- Mature

Fleece Classes:

- Hogget
- Any fine wool other than hogget
- Any 'B' wether fleece

Additional prizes:

- Best dual purpose ram
- Highest commercial value fleeces
- Sheep weight competition
- Fleece weight competition
- Micron estimate competition
- Under 21's sheep judging competition

Competition Notes:

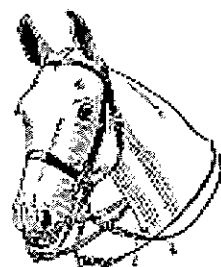
- FIGAS generously offered to fly fleece entries free of charge
- Rams in Class 1 should not have any permanent incisors erupted
- Rams in Class 2 should only have two incisors erupted
- All fleeces should be skirted; neck, belly and all stain removed before the fleece is rolled
- Please notify either Nigel or Keith of any entries

STANLEY SPORTS ASSOCIATION

HORSE RACING: SATURDAY 26TH DECEMBER AND SUNDAY 27TH DECEMBER 2009.

GYMKHANA AND CHILDREN'S EVENTS: MONDAY 28TH DECEMBER.

ALL DAYS ACTIVITIES COMMENCE 09:30AM.



Recipe Spot - from Delia online

Christmas Cake

Method

Ingredients

- 1 lb (450 g) currants
- 6 oz (175 g) sultanas
- 6 oz (175 g) raisins
- 2 oz (50 g) glacé cherries, rinsed, dried and finely chopped
- 2 oz (50 g) mixed candied peel, finely chopped
- 3 tablespoons brandy, plus extra for 'feeding'
- 8 oz (225 g) plain flour
- ½ level teaspoon salt
- ¼ level teaspoon freshly grated nutmeg
- ½ level teaspoon ground mixed spice
- 8 oz (225 g) unsalted butter
- 8 oz (225 g) soft brown sugar
- 4 large eggs
- 2 oz (50 g) almonds, chopped (the skins can be left on)
- 1 level dessertspoon black treacle
- grated zest 1 lemon
- grated zest 1 orange
- 4 oz (110 g) whole blanched almonds (only if you don't intend to ice the cake)

Equipment

You will also need an 8 inch (20 cm) round cake tin or a 7 inch (18 cm) square tin, greased and lined with silicone paper (baking parchment). Tie a band of brown paper round the outside of the tin for extra protection.



You need to begin this cake the night before you want to bake it. All you do is weigh out the dried fruit and mixed peel, place it in a mixing bowl and mix in the brandy as evenly and thoroughly as possible. Cover the bowl with a clean tea cloth and leave the fruit aside to absorb the brandy for 12 hours.

Next day pre-heat the oven to gas mark 1, 275°F (140°C). Then measure out all the rest of the ingredients, ticking them off to make quite sure they're all there. The treacle will be easier to measure if you remove the lid and place the tin in a small pan of barely simmering water. Now begin the cake by sifting the flour, salt and spices into a large mixing bowl, lifting the sieve up high to give the flour a good airing. Next, in a separate large mixing bowl, whisk the butter and sugar together until it's light, pale and fluffy. Now beat the eggs in a separate bowl and add them to the creamed mixture a tablespoonful at a time; keep the whisk running until all the egg is incorporated. If you add the eggs slowly by degrees like this the mixture won't curdle. If it does, don't worry, any cake full of such beautiful things can't fail to taste good!

When all the egg has been added, fold in the flour and spices, using gentle, folding movements and not beating at all (this is to keep all that precious air in). Now fold in the fruit, peel, chopped nuts and treacle and finally the grated lemon and orange zests. Next, using a large kitchen spoon, transfer the cake mixture into the prepared tin, spread it out evenly with the back of a spoon and, if you don't intend to ice the cake, lightly drop the whole blanched almonds in circles or squares all over the surface. Finally cover the top of the cake with a double square of silicone paper with a 50p-size hole in the centre (this gives extra protection during the long slow cooking).

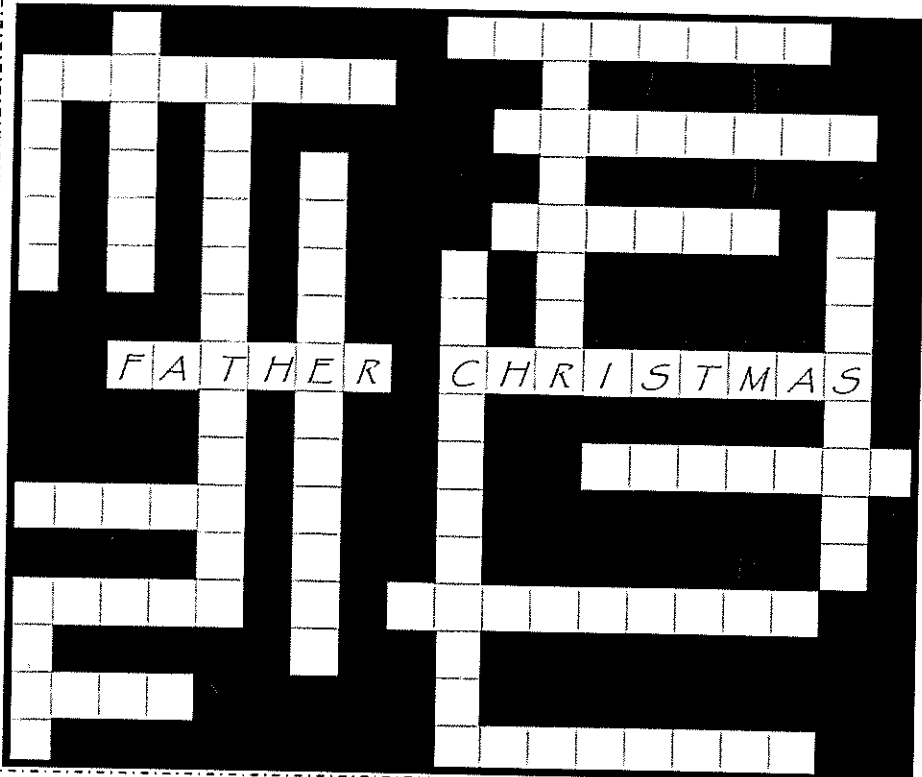
Bake the cake on the lowest shelf of the oven for 4½-4¾ hours. Sometimes it can take up to ½-¾ hour longer than this, but in any case don't look till at least 4 hours have passed. Cool the cake for 30 minutes in the tin, then remove it to a wire rack to finish cooling. When it's cold 'feed' it - make small holes in the top and base of the cake with a cocktail stick or small skewer, then spoon over a few teaspoons of brandy, wrap it in double silicone paper secured with an elastic band and either wrap again in foil or store in an airtight container. You can now feed it at odd intervals until you need to ice or eat it.

Dates for the Diary

- 25th December Christmas day!
- 26th December Port Edgar BBQ - starts at 11am, everyone welcome, just bring your own tipples!
- 26th & 27th December Christmas Races
- 29th December Ram & Fleece Show - Coast Ridge shearing shed, Fox Bay
- 1st January Raft Race - 12pm start from B Slip, Ross Road East
- 27th January 2010 Dog Dosing (Droncit)
Please remember to contact the veterinary service on telephone no 27366, fax no 27352 or email imports@doa.gov.fk and advise when your dogs have been dosed

PUZZLE PAGE

Christmas Word-Fit



Can you place all the words in the grid? To help you start, we have completed one. Good luck!

- Advent Calendar
- Angel
- Barbecue
- Carol Singing**
- Decorations
- Father Christmas**
- Holly
- Home
- Horse Racing
- Midnight Mass**
- Mistletoe
- Nativity Play
- Presents
- Reindeer
- Sleigh
- Stocking

~ When two words are in bold, they are split up in the grid.

Merry Christmas!

Sudoku

Each Sudoku has a unique solution that can be reached logically without guessing. Enter digits from 1 to 9 into the blank spaces. Every row must contain one of each digit. So must every column, as must every 3x3 square.

		5	8		9	7		
	8			2			4	
6			1		4			8
8		6				1		7
	9						3	
3		1				4		9
9			6		3			5
	6			8			1	
		8	9		5	6		

Hint: Describing out loud what you see it may give you the clue you need!!

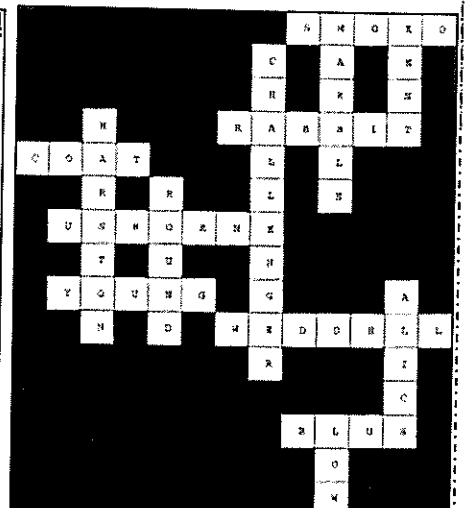
DingBat Brain Games
Flex your brain, free your mind and think laterally

QUOTE

SHOW

Last Month's Solutions

1	2	5	8	3	6	7	9	4
6	7	8	1	9	4	5	2	3
9	3	4	2	5	7	1	6	8
3	1	2	9	7	8	4	5	6
5	4	7	3	6	1	9	8	2
8	9	6	5	4	2	3	7	1
7	6	1	4	2	9	8	3	5
4	5	9	6	8	3	2	1	7
2	8	3	7	1	5	6	4	9



Brainteaser

I dig out tiny caves, and store gold and silver in them. I also build bridges of silver and make crowns of gold. They are the smallest you could imagine. Sooner or later everybody needs my help yet many people are afraid to let me help them. Who am I?

PROMISE

Broken Promise

HAT

Top Hat

Brainteaser

Choose from: luxury, struts, stylus, syrupy, syzygy, trouty, trusts, twisty.