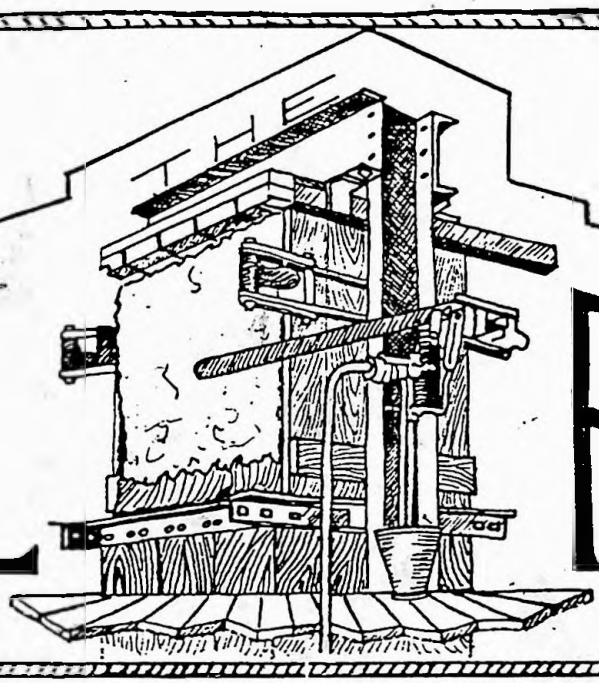
WOOL PRESS



A NEWSLETTER FOR FALKLAND ISLAND FARMERS PUBLISHED BY FIDC IN CONJUNCTION WITH ARC COVERING A WIDE RANGE OF FARMING AND RELATED TOPICS INCLUDING NEWS AND VIEWS OF LOCAL FARMERS

ISSUE No. 1 **JUNE 1985**

Introduction By
H.E. The Civil Commissioner

It gives me great pleasure to write this introduction to a new newsletter in the Falkland Islands. I understand that the main purpose of the "Wool Press" will be to inform practising farmers about farming news and to provide a forum for discussion of farming topics of all kinds. Its Editor is the Farm Management Advisory Officer and it is financed by the Falkland Islands Development Corporation (FIDC). It will contain articles illustrating different farming methods and ideas, prepared in cooperation with the Agricultural Research Centre (ARC). There will be news of events and developments applicable to the farming scene in the Falkland Islands and a miscellany of articles ranging from fertiliser prices to accounts of the work of the FIDC and the ARC.

Like any other publication of this kind, the "Wool Press" will depend very heavily on contributions from readers. The Editor wants it to be a platform for open discussion between farmers themselves and I hope that readers of this first edition will not be hesitant to come forward with ideas and comments.

The "Wool Press" has the full support of the Sheep Owners Association and it is not intended to supersede or compete with the SOA Newsletter, which performs a different function and is written for a more selective readership

I cannot think of a more apt title for this new publication than the "Wool Press" and I wish it and its contributors every success.

Sir Rex Hunt
Civil Commissioner

FROM THE AGRICULTURAL

RESEARCH CENTRE

The ARC is delighted to see the launch of the "Wool Press" and will be making regular contributions on subjects of interest and relevance to Falkland farming. The first issue of this newsheet is perhaps an appropriate time to have another look at what the ARC does and why we do it.

The Agricultural Research Centre (formerly the GTU/FIARDC) carries out "research into Agriculture with a view to developing new systems of farming" - what does this mean?

Genuine improvements in Falklands farming, ie. increased wool output and improved profitability, can only come about through detailed study of the problems and methods of solving them. The process of research can be likened to building a brick wall. A good wall requires a solid foundation, sound bricks and a builder to cement it together. The foundation for agricultural improvement is a thorough knowledge of the industry, its operation and its problems. The bricks in farming are parcels of knowledge, each individually proven, which can then be assembled into a "package" of several or more, leading to greater production and more profitable farming.

It is now apparent that no single change or improvement will lead to a major increase in wool production. That can only come about through a combination of measures ranging from improved nutrition, changes in stock management, breed improvement, fencing, better use of the natural pasture, labour efficiency and financial planning - hence the idea of a 'package'. No one combination of measures will suit every farm - the package can't be bought off the shelf!

Much of the early work carried out by ARC was aimed at identifying the problems - why are lamb losses so high, what is the greatest influence on hogg loss, how much does the natural pasture produce? Many of these questions now have answers. More importantly what can we do about them? If as appears to be the case, part of the answer is to provide better nutrition for the sheep; which grasses should we grow, how can we establish them and how much and what is their fertiliser requirement? Which stock will benefit most from better feed and what animal health problems are associated with heavier stocking? The list is long.

To answer the most important of these questions specific trials have been set up and are continuing. Unfortunately Agriculture does not lend itself to rapid change; there is only one season in the year, and most trials must be observed over a period of years to be certain that what one is seeing is not just a seasonal effect. Too often one hears of an idea that has been tried and failed; it is important to ask why. Often a negative answer or a failure can tell as much as a success.

So what have we got to show for it? Many of the questions are now being answered, albeit with preliminary results. The wall is under construction and a farm package based on some 15 key changes and improvements is being developed. Amongst these are an improved lambing area, a simple breeding scheme, fencing and stock management. The ARC research programme is specifically designed to benefit the Falkland farmer; much information is available now. As knowledge increases both the quality and amount of advice we are able to offer will increase.

In addition to our research activities the ARC does offer advice to all farmers and works closely with the FIDC in the administration of the Land Development Scheme.

In future, issues of this newsheet aim to present and discuss as much of our information as possible. We would very much hope that this could be a two way process and will welcome your ideas, letters and comments.

Peter Maitland

Wool Prices & International Markets

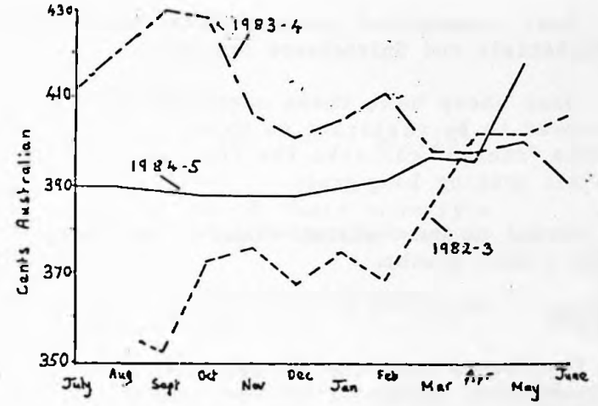
The not infrequent movements of prices on the wool market is a well known feature and, we might add, hazard of sheep farming here in the Falklands.

Reasons for their fluctuations are of course many and include factors such as changes in sheep numbers and wool production by different countries, worldwide manufacture and consumer interest in buying wool as opposed to other textiles etc and the influence of all these contributing factors on the market creates movement in wool prices.

A look at wool prices over the last three years (seasons) highlights some of the fluctuations and characteristics of the market and provides a useful 'sample' to look back and briefly review its trends and progress.

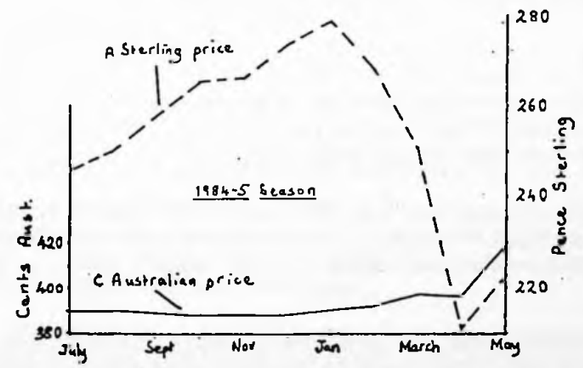
The graph below shows monthly average wool prices in Australian cents per kilo for 27 micron wool. This demonstrates quite well world prices as they affect crossbred wools and prices for grades just a few microns coarser and finer usually follow very closely the same pattern, and, whilst particular quality and specialist wools and different delivery destinations command price premiums or differentials, as is the case for Falkland wools, the price your agent obtains or offers you on any day, even for delivery at some future date, will be governed by international market fluctuations. Only where a marketing board exists to purchase and set guaranteed prices is the farmer not vulnerable to the vagaries of the market.

Graphs show clearly how the direction and level of wool prices bear little relationship one year to the next, illustrating why farmers and wool traders often view the market with much uncertainty. In each of the three years prices have behaved rather differently.



Wool merchants and traders in Britain of course translate wool prices in major markets around the world (such as Australia) into £ sterling. Movements in monetary exchange rates between these two currencies will cause sterling values for wool to fluctuate (in addition to the movement in world wool prices), affecting wool revenues of Falkland Island farmers.

This season's currency movements have been severe and the second graph shows how sterling wool values (p/kg) for the same 27 micron wool has varied relative to 'international' prices in Australian dollars during this 1984/85 season. The line showing prices in Australian cents is almost a straight one (same line as previous graph, drawn half the scale), superimposed on it sterling prices showing how dramatically these have fluctuated this season.



The sheep farmer is of course at the 'receiving end' of all this and his farm business has to successfully navigate a course through both storm and calm of the market.

Pink Eye

Have you noticed this condition amongst sheep on your farm or been puzzled by cases of eye infection or blindness in the flock? The FIG veterinarian Mr Dennis Lampard discusses this disease.

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Pink Eye or Contagious Ophthalmia is an infection of the eye affecting sheep and some other farm animals. Whilst not a major disorder it is probably more common in the Falklands than most people realise and I've already seen a fair number of cases during my visits around the settlements.

Cause

Most authorities agree that the cause is a mixed infection involving Rickettsia and Spirochaete organisms.

Many sheep have these organisms already present in the eye and they appear to be resistant to them until damage occurs to the eye surface. This 'damage' can take the form of dust particles blown by the wind or while grazing long grass.

Spread to non-resistant sheep can also occur via flies especially during the summer months.

Signs

The first symptom is discharge from the eye as the organisms attack the transparent surface of the eye (cornea) and it loses transparency becoming a bluish-white colour. If infection persists the inside of the eye will become affected and the eyeball becomes an abscess which eventually ruptures. In many cases this last severe stage is not reached and the sheep recovers over a period of some weeks or is sometimes left with a bluish cast to the eye and permanent blindness.

If both eyes are affected even for only a short period of time the animal is very vulnerable to the natural hazards of the camp such as ditches and streams and this probably accounts for more deaths than is commonly realised. At the very least there will be considerable loss of condition during the recovery period since grazing is greatly impaired.

Treatment

Until recently this consisted of the application of ointments and powders to the eye surface several times a day for several days. This would obviously be an impractical method here in the Falklands.

The latest treatment involves injection of a small quantity (half a cc) of antibiotic into the upper eyelid which is lifted up and injected into from below (into the fleshy red membrane) using a fine needle and a 2cc syringe.

One injection is usually sufficient to produce a rapid cure if the disease has not progressed too far. The cost is really quite small and infected sheep could be taken aside when going through the shearing shed or drafting race etc. It would be worthwhile carrying injections when in camp to treat affected animals.

A FALKLAND ISLANDS WOOL BOARD ?

As well as looking at ways of diversifying the economy, FIDC clearly wants to help the Falkland farmer get the best out of the traditional product - wool.

We introduced land improvement schemes to help improve the production of wool, but we feel that we also ought to look at the other side, the marketing of wool.

Most countries with a large wool production have a wool marketing board of some sort.

The main aims of such boards tend to be:

1 To achieve the best possible net return for their country's wool.

2 To stabilise returns to the producers.

3 To provide a marketing service at the lowest possible price.

4 To improve the physical condition of their country's woolclip by price incentives and produce advisory services.

5 To stimulate demand for their country's wool by technical research, product development and promotion.

I am sure that all producers in the Falkland Islands will agree that we should seek out ways of achieving the same ends for Falkland Island wool. Presently it is marketed by agency companies in the United Kingdom. Whilst they have achieved marvels for their producers, they still have some disadvantages over a wool board.

There is no way that they can stabilise prices. A wool board, normally with backing from its national government, sets a guaranteed price for wool every year including prices for all the different grades and qualities. If the price achieved in a bad year is much lower than the guaranteed price, then the wool board makes up the difference. In a good year the wool board takes the surplus to make up for the bad years. On the whole the wool board tries to break even on its forecasts. The advantages to the farmer are that he can forecast ahead and cannot be caught out by any dramatic drop in wool prices.

Promotion of wool as a national product is an expensive business. An agent is unlikely to spend too much money on this as his competitors will also get the advantage of his advertising. Furthermore promotion of certain types or grades of wool as specialist products is difficult in an agency situation. It is all too easy for an agent's competitor to undermine such promotion by undercutting the agent.

Control of the product is in the hands of agents residing in the UK and not in the Falkland Island farmer. Also commissions paid out to these agents stay in the UK. We feel that most of this money should come back to the Islands where it belongs.

FIDC thinks that there are many good reasons for seriously considering establishing a Falkland Islands Wool Marketing Board. The New Zealand Wool Board and the British Wool Marketing Board both feel that there is sufficient evidence to justify a feasibility study and the Development Corporation has commissioned the two organisations to jointly determine the feasibility/desirability of establishing a Falkland Islands Wool Marketing Board.

The British Wool Marketing Board is sending their technical director, Mr Colin Powell, and the New Zealand Wool Board their European Regional Director, Mr Noel Thomas, a transport and administration expert, to the Islands in November 1985, during the shearing season.

We hope that you will all give this idea some thought and let Mr Thomas and Mr Powell know what you think when the arrive here. You are also welcome to write and let them or us know your thoughts on the subject.

THE UPLAND GOOSE AND AGRICULTURE

This is the first of a series of articles on the goose programme currently being undertaken at ARC and in future editions of the "WoolPress" selected topics will be chosen and discussed. In this first edition situations in which goose grazing may be damaging to the sheep farming industry are discussed.

The numbers of geese grazing on different pasture types vary considerably throughout the year and between areas within the Islands. The dominant vegetation in the Islands is whitegrass camp, yet this supports a small proportion of the total goose population and in this situation damage is negligible since most of the annual grass growth dies and goes into the production of more peat! However, the short greens along the coastlines, around ponds and near settlements attract large numbers of geese, especially in relation to the small area they cover compared with whitegrass camp. The individuals collecting on these areas are often young birds and individuals that don't hold a territory. Greens close to water are often used as shedding sites.

My own research has concentrated on re-seeded pasture which attract some of the highest densities of geese recorded in the Islands, more similar to the large flocks of geese that are attracted to grass and arable crops in England and Scotland. Numbers are generally highest in the late winter or early spring period when other sources of food are very short. This is also a time when many sheep are also short of food, in particular breeding ewes: the animal production programme has domonstrated the value of providing better food for sheep at this time. This then is the period when conflict is most likely to occur. Climatic conditions at this time do not favour grass growth with strong winds and low rainfall, leading to shortage of water coupled with low soil temperatures.

In some situations such as valley greens the goose's territorial system keeps goose numbers low especially when compared to sheep numbers that exceed goose numbers by a factor of 50 or more: again in this situation damage is negligible and in fact attempts at control can be counterproductive.

In conclusion it is apparent that likely damage is restricted to certain types of pasture at particular times of the year, and that any control programme should be designed around this fact. A general reduction of the Upland Goose population is not a viable possibility. Past attempts at control and reasons for their failure will be discussed in the next issue.

Andrew F G Douse

FARM MANAGEMENT ASSISTANCE AND ADVICE

A farmer is occupied much of his time shepherding and shearing, tractor driving, building, repairing and maintaining equipment etc, and organising employees to do likewise. But additionally he must make time to think through how best to run the farm, making efficient use of the land, livestock and equipment, to build a successful and profitable farm business.

From his knowledge and understanding of the farm and its productive capacity the farmer will have a basic plan by which he runs the farm, incorporating his expectations and ideas of how to best achieve the greatest output and profitability. Daily and seasonal tasks carried out around farm and camp are geared to fitting in and meeting these plans and production targets. This is the essence of Farm Management.

Record keeping is part of the management task. Livestock records, adequately maintained, provide important information to help plan making up of flocks and predict stock numbers and requirements for following seasons, also to provide 'productivity' measures such as lambing percentages, stocking rates etc. Similarly simple cash and financial records will help budget and calculate cash needs for this year and indicate which items can afford to be purchased in the coming year. Farm records already kept are obviously helpful in this way and I as the Farm Management Adviser can help you get the most out of them, assisting with ideas on their layout and how to obtain important 'management information' for tighter control of the farm business.

Farmers look towards new farming ideas to further increase farm performance and efficiency. This may incorporate methods and techniques as used by other sheep farmers and neighbours, using new scientific ideas or expenditure on new equipment such as fencing or machinery. Background information is necessary to help assess and decide what improvements may be possible and different ideas which may be useful to a particular farm. I in cooperation with ARC welcome your enquiries and can assist with information and the development of new farming ideas and systems for your farm, along with calculation of likely costs and profitability for the business.

Stephen Carrington
Farm Management Advisory Officer, FIDC

WHAT ARE FIDC UP TO?

Now there is no Penguin News to pass on details of what we are thinking of and planning, we thought it a good idea to include a roundup of various FIDC activities in the Newsletter to keep readers in touch. If anyone has any queries or interest in any particular item they should write to the Editor for further information.

AGRICULTURE

Horticulture

At their last meeting the Board of the Development Corporation approved a project to establish an ultra-modern market garden based in Stanley to be built and commissioned by Stapley Contracts Ltd of Ashford in Kent. The market garden will be run by a company to be established jointly by Peter Henderson and FIDC growing mainly be salad crops, tomatoes, lettuces, cucumbers etc. Early 1986 should see the first crops.

Agricultural Supply Co-operative

Pledges for shares in the proposed Co-operative have been very generous but we are still short of the required funding and We have sent out a letter to all of you requesting even more generosity, which we hope will result in the required share capital. We have asked that the Co-operative be admitted to a large federation of British Co-operatives to obtain the advantage their buying power and assistance in the UK. The federation concerned, United Farmers Ltd of Edinburgh, have confirmed that they would welcome a Falkland farmers' co-operative as a member. One of the members of the federation, North Eastern Farmers Ltd (one of the largest agricultural co-operatives in the UK has offered assistance in training an islander to become manager of the new co-operative and also offered the services of their Managing Director to assist in the set up and initial phases of the new co-operative. Again we want to see this going for 1986.

INDUSTRIAL

Clanwood Components

We are very pleased to have had with us Mr Bernard Buss, Managing Director of Clanwood Components, manufacturers of Ashworths new dairy house and the new houses to be erected at Fox Bay. Mr Buss is interested in setting up a company locally to erect his kit form houses At a later stage he hopes to actually make the kits in the Falkland Islands. We consider that this is a great development and we are doing everything to encourage Mr Buss to carry on with his plans.

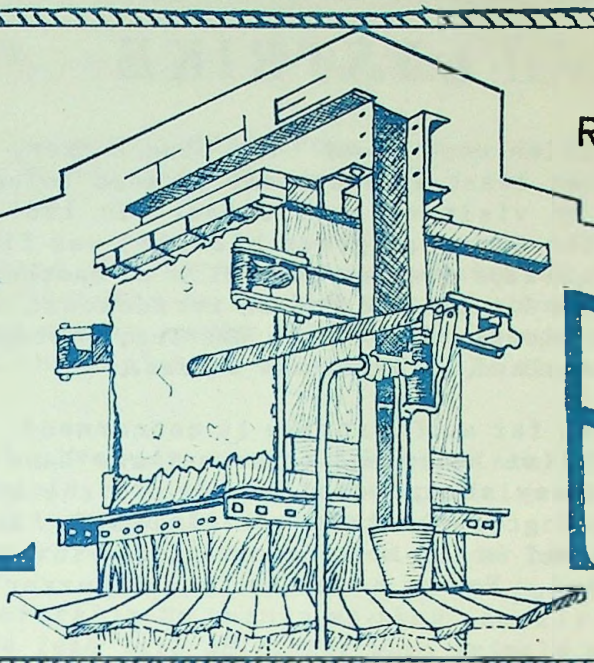
Shop Complex at MPA

FIDC is aware that the move of all the troops to MPA could have a serious effect on Stanley traders. We are working with the Falkland Island Traders Association to design a shop complex of perhaps six small shops to be built at Mount Pleasant Airport. We would like to combine with this a small cafe, toilets and waiting area so that this can effectively become the new civil terminal at Mount Pleasant. If anyone outside Stanley is interested in a shop outlet - please get in touch with us.

FISHERIES

So encouraged by the initial catches of crab by Fortoser Ltd that we have, in conjunction with themselves, established a new company called Falkland Sea Foods Ltd. At the moment this is only a name, but we hope that it will be possible for Falkland Sea Foods to bring down a second trawler and processing facilities soon so that Falkland Island crab can start making a return to the local economy.

We would like to congratulate John Williams and his team, not least for the wonderful exhibition they set up at the opening day of Mount Pleasant Airport.



WOOL PRESS

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In This Issue :

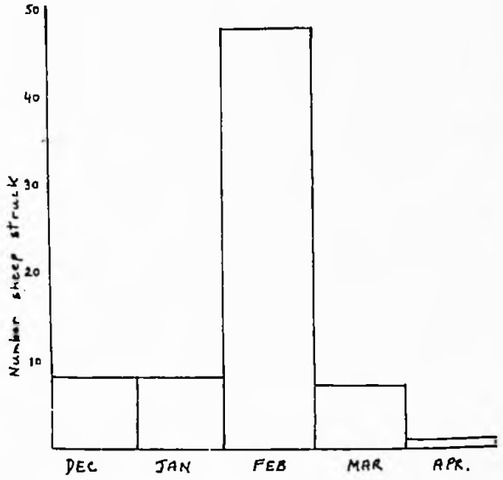
ISSUE No. 2 SEPTEMBER 1985

FLYSTRIKE

Where have all the flies come from? The blue buzzer, Calliphora vicina, has been with us for at least 25 years and is said to have been brought in from South America by visiting meat ships. In 1981 the green buzzer, Lucilia sericata, (the European green blowfly) was first seen. Earlier this year Terrance Phillips drew my attention to another that was slightly narrower than the blue buzzer and had an irridescent black back. It has been identified as a blowfly from North America, Protophornia terraenovae. It also occurs in Greenland, Siberia and Sweden.

What does this mean as far as flystrike is concerned? We've had the blue buzzer for years but live sheep and other animals have been safe. But in the 1983/84 season many sheep were struck and the significance of the increasing numbers of green buzzers was realised. This is a fly which strikes live animals and is the most important fly involved in flystrike in Europe and New Zealand. Now we have the "black buzzer" which may also be striking our sheep.

The results of two years monitoring of flystrike shows that it is here to stay. In 1983/84 ten farms reported flystrike with 127 animals affected and in the 1984/85 season 24 farms reported cases with 71 animals affected. The diagram gives the monthly breakdown for 1984/85. In the last two seasons February and March have been the worst months, with a few pet lambs struck in December. Of the total sheep struck 90% have been lambs. The breech or the tail area has been affected in 95% of cases.



Blowfly Strike in Sheep
Results of Questionnaire,84-5 season

In relation to our total sheep population the problem seems small but lambs are particularly at risk; especially those with dirty tails.

What can we do about flystrike? Lambs could be crutched in January especially if they are to be put on feed which could give them diarrhoea. In the event of an outbreak they should be dipped. During the Autumn farmers would be well advised to have some flystrike dressing available to treat individual cases. We can only hope that the flystrike problem does not get any worse.

From now on the Agricultural Department will monitor the problem, so your co-operation in reporting is needed.

Contributed by Neil Pullan.

A FURTHER WORD ON PINK EYE :

The ARC report recently posted out to all farmers included on page 103 a short discussion on the incidence of Pink Eye and this has drawn comments from farmers describing their own experiences.

Mike Morrison at Port Louis noticed the problem in a few shearlings and maiden ewes rather than lambs during the previous season. Another farmer explained how he'd first seen the infection in lambs kept in settlement paddocks and then spread to older sheep later in the season. He says this past season had been the worst with many animals seriously affected and leading to many sheep becoming blind, although most appeared to recover their sight eventually.

How serious is Pink Eye on your farm? We'd like yourcomments.

A Look at Fodder Crops

Several farms already grow fodder crops around the settlement including 'root' crops such as turnip and swede - usually for milk cows, in a nearby paddock.

This and the experience of growing them as vegetables in their gardens has prompted a number of farmers to consider using them as a source of extra feed for sheep during winter months to meet the sheeps nutritional needs at this time and "fill the gap" left by a shortfall in quality feed in camp over winter.

A feed 'supplement' given to ewes in late winter for instance could especially help maintain and improve their condition during late pregnancy when improved nutrition can often contribute to greater lamb survival. Alternatively it may prove useful to shearlings in late winter.

Swedes may prove preferable to turnip as they usually keep for longer in the ground to provide feed late in winter when animals most need it.

There's a number of important points to consider. Location of a suitable growing site, placed to give easy access to and movement of sheep onto the crop. A settlement paddock might well be chosen. This will involve gathering the flock from their camp and driving them back again after. Otherwise, if the crop is to be grown in a large camp a fence will need constructing around it. It is also important that the sheep can run back to sheltered and protected ground.

Eating roots is said to lead to greater wear on animals teeth and to higher culling of older ewes due to brocken mouths. Whether it will prove as critical in the Falklands remains to be seen.

Machinery, including items such as a plough or rotavator, probably a harrow and set of rolls and obviously a seed drill, for sowing into fairly wide rows, will be needed.

So fitting an 'arable' root crop into your farm system could be neither easy nor necessarily cheap to adapt. Of course the costs of growing the crop are repeated each year - and differs from a reseed where costs of establishment are "once only".

It's well known, from experience in other countries that root crops can yield many tons to the acre. However not really having been grown on a "field" scale in Falklands conditions it's unsure how successful and useful they'll be as a farm crop, quite what yield to expect, fertiliser to apply, and so on. But thorough land preparation and careful sowing of the crop in spring time is certainly important for a successful emergence and start to the crop. The impact of geese grazing on young plants could also be serious, requiring control measures.

Quite a number of acres will have to be grown in order to provide an adequate 'bite' for the whole flock although farmers might choose to draft out ewes in good condition and perhaps only feed roots to those stock in poorer condition, to reduce numbers.

Some farmers have told us of their success in growing the crop but on a small scale in the settlement. One farmer growing several acres last season reported a poor and scattered emergence of turnips, due to geese damage.

We welcome farmers views on using fodder crops and to hear how they might plan fitting them into their farming system.

Farm Insurance

A part of the task of managing the "farm office" - paying the bills, keeping the stock and cash records, etc., is also to look after the farm's insurance needs.

When renewing annual insurance premiums covering your farm assets, buildings, machinery and the woolclip for instance, it's worth taking time to check they're insured to their full replacement value. This is frequently overlooked. In case of say a farm fire, insurance payment usually needs to be adequate to purchase new items in place of those damaged or destroyed.

The new replacement cost of many assets on the farm has risen over the years due to inflation. Similarly where a farm building has been re-equiped or a house re-furbished there will often be an appreciation in its replacement value.

It's well worthwhile reviewing your insurance coverage to meet the necessary replacement cost of all those items of plant and equipment required in running the farm.

Whilst FIDC is unable to assist towards the cost of this insurance we are happy to seek a competitive quotation for anyone experiencing difficulty in obtaining suitable coverage.

Portable Sheep Handling Yards

This article discusses the advantages of using portable sheep handling yards in the Falkland Islands. It is first worthwhile describing the range of equipment available on the market, which varies considerably in terms of price and complexity.

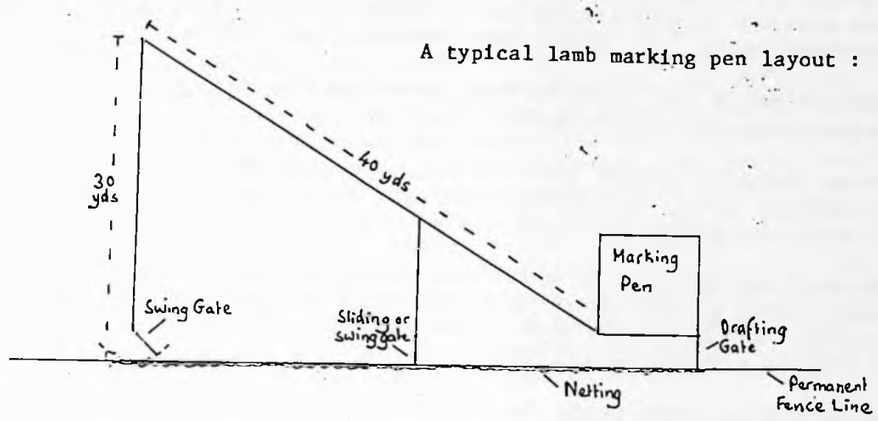
The simplest and most suitable yards consist of ready made steel sections, approximately 9' long by 3' high, either railed or sheeted which connect together by means of pins in any shape or combination. Drafting gates, swing or sliding gates are also available which enable the operator to build a variety of pen sizes and shapes for different purposes. A more complex arrangement includes a purpose built trailer carrying the race and other sections in 'fold down' form. These are then swung off the trailer as a complete unit and pulled out to construct the yards. The problem, apart from expense, with this type is often the trailer is not suited to Falkland Island conditions and the layout of the pens is inflexible.

The main advantage of portable yards is their versatility in terms of design and location. For example, they can either be used as a permanent installation at the wool shed, or as a portable system for use in camp. By taking the yards to the stock at marking rather than vice versa saves time and man-power, reduces the stress on the stock and can result in less mis-mothering of ewes and lambs. Similarly other operations can be carried out in the corner of a camp with little disturbance to other sheep or moving a whole flock through another paddock unnecessarily. Certainly with increasing sub-division of camps for easier management, there is no problem deciding where best to locate a set of yards. One set of portable pens can replace several permanent marking pens, and if the use of the camp changes for any reason, a suitable site for portable yards can always be found.

Some further points are worth considering. Sheep will move through a yard system more freely if the ground is hard and the layout takes account of slopes etc. Often with permanent yards one encounters the extremes of winter mud and summer dust. Avoiding dirty and dusty conditions may well assist in reducing any portential build up and transmission of disease. Portable pens allow a different site to be chosen on each occasion.

Whilst the cost of a portable yard compared to one permanent set is greater and depends upon the choice of size and design, the additional capital required is offset by the portable yard's versatility.

A typical lamb marking pen layout :



Portable Yard
equipment cost approx.£1235 FOB,-one required for whole farm, readily moved from site to site, life expectancy 15+years, layout variable, may be extended with netting etc.

Permanent Yard
Material cost approx.£550 FOB, excluding labour, 1 required in each camp, used once a year, life expectancy 20 years.

In summary: a portable system offers great flexibility coupled with scope for improved and easier management of stock, greater labour efficiency and significant capital saving if it can be used to replace more than one permanent installation.

Further information is available from the ARC or Farm Management Adviser.

Sheep Husbandry Department, ARC.

Farm Improvements and the FIDC Grant Scheme

The Land Development Scheme, the name given to the programme of grant aid offered to farmers here in the Islands, has been running now for almost a year. In this time grant has been approved on a wide variety of items and projects able to provide real improvements in the management and performance of the farm.

Grants can be awarded on many farm investment items and projects considered important and necessary for effective performance and management of your farm. Much of the fencing required to subdivide the very large camps on new small farms for example is of this purpose.

Then many other investments, for example certain buildings, machinery, or a reseed, able to provide an improvement on the farm by way of greater farm productivity and performance, are also covered in the scheme.

It's important though that items purchased with grant assistance do provide some real benefits to the farm over the years to come.

The scheme is doing much to stimulate farm investment and is encouraging major improvements in wool output and profitability. Help and advice is always available to evaluate what investments could suit your farm in order to expand and improve your farm operations with the help of this grant scheme.

The rate at which grant is payable is determined by size of the farm flock, - total sheep put out in the autumn, and the maximum rate of grant is now payable on numbers up to 7500 sheep. Previously it was 5000.

We'd like here to say a few words on how grant applications are considered and to emphasise some particular points.

FIDC need some details about the item to be purchased. Normally a representative will visit to discuss this and to assess that it fulfills the conditions of the scheme outlined above.

The scheme doesn't allow grant on purchases which are simply replacement of the same item already on the farm - even if it is old or in need of repair - there wouldn't really be any added productivity in replacing an item potentially able to already do the job!

We should also mention that grant is not payable on second-hand materials for say a building but we will pay for labour at agreed rates on approved building construction.

Similarly other items and 'works' which involves use of labour in their construction or preparation, such as fencing or establishing a reseed for instance, a fair payment allowance is calculated according to a scale of rates reflecting the type and nature of work involved and included in the calculation of grant.

Whilst FIDC insist that work must not start nor a purchase be made prior to applying and approval being received for grant assistance every effort is made to process applications without undue delay.

Where there is genuine need to seek grant approval for an item at short notice we will do our best to give it priority consideration and applicants should contact our offices immediately, explaining the reasons.

As for the cost ofthese farm purchases we must not lose sight of how much money the farm is spending and is taken out of the bank account to pay for these new farm investments/purchases.

Farmers are well aware how farm costs and expenses soon mount up through the year especially where farm loan repayments have to be paid too - not leaving much for profit and family living expenses! And with wool cheques usually paid during one short period of the year it can become quite difficult to make farm and living expenses stretch until wool is sold next year.

A budget is best constructed to forecast the expected cash balance in the farm's bank account through the coming year. Listing the expected cash receipts for wool revenue etc. plus the different farm costs and expenses a picture is soon built up of how much cash remains in the bank. This will help determine whether enough cash is available during the year for new farm investments.

We should like to do a budget of this kind with smaller farmers on occasions when planning to purchase new items for the farm with the help of grant assistance under the scheme.

Goose Control : A Short History

Ever since the Falklands were first discovered, upland geese have been culled by man, often in large numbers. Two factors have allowed this; their abundance and their almost absurd tameness, something that persists to this day. Despite the large number of geese that have been killed, the upland goose is still very abundant with an estimated population of about 300,000 - 500,000 throughout the Falklands. The aim of this article is to look closer at the history of goose culling and the reasons for its failure to reduce the population.

The conflict between sheep farming and geese intensified at the beginning of this century when sheep numbers and productivity began to decline dramatically, after reaching a peak of 807,000 sheep in 1898. Pressure from farmers to control the number of geese mounted, and while the Governor at the time, Grey Wilson, was unsympathetic to these requests, an amendment to the 1901 Livestock Ordinance was passed (in1905) introducing a bounty scheme that paid 10 shillings for 100 goose beaks. The funds came from the then redundant scab fund. Culling limits were set at 25,000 from each main island, though in later years these were increased to 50,000 from each island. The official campaign ended in 1912, though many farms continued the bounty payments, a situation that persists to this day. During the years 1905 to 1912 about 516,000 beaks were handed in for payment, about 74,000 each year. Records of the number of geese killed after 1912 are not available, but in 1980 Ron Summers estimated that about 25,000 geese were killed throughout the islands both for bounty and other reasons.

Unfortunately there are no records as to the effect this had on the goose population. The limits set by the government were not founded on any factual data, nor was there any attempt made to monitor the effectiveness of the campaign. Cursory examination of stock returns from the first twenty to thirty years of this century suggest that the control campaign had little or no effect on the sheep farming industry; sheep numbers continued to decline and wool weights remained low. A full analysis of the data neeeds to be carried out before firm conclusions can be drawn.

Premeditated attempts to control or exterminate animal populations have been notoriously unsuccessful, as experience with the upland goose demonstrates. There is a relatively simple reason for this: as numbers are reduced by a control campaign the availability of any resource to the remaining animals (food, breeding territories etc.) is unaffected, consequently the quantity available to individual animals actually increases. This can lead to an increase in survival or breeding success (or both) that compensates for the reduction in numbers caused by the control program. There does exist though a level above which the population cannot compensate for numbers lost, this is known as the maximum sustainable yield. Culling or harvesting animals at a level greater than this 'threshold' will cause the population to go into decline. The problem often encountered though is that the time and effort needed to exceed this level makes the control operation cost ineffective - the cost far outweighs the benefit. A point that must also be borne in mind is that any control programme has to be continued year after year or the population will eventually climb back to its original size.

Culling of upland geese has always taken a relatively small proportion of the upland goose population, well below that needed to cause a real decline in numbers. In fact the cull is little more than sustained yield harvesting, similar to say a fishing industry (that isn't over exploited). Thus, while it is technically possible to reduce the goose population, the benefit to the sheep farming industry is most unlikely to justify the time, effort and expense incurred.

Andy Douse, ARC.

Purchasing Stock Replacements

Our recent questionnaire asking smaller farmers about their interest in buying-in stock replacements has brought an encouraging response. Whilst there are still some questionnaires to be returned, initial indications suggest interest in purchasing stock, especially wethers, to supplement their flock numbers. Obviously several farmers feel there is adequate room to expand and intensify stocking rates on the farm.

In light of this interest we are keen to encourage someone having suitable ground to establish a breeding unit able to supply high quality animals, providing a valuable fleece, in reasonable numbers each year.

Little extra expense is usually incurred in carrying a few additional sheep other than shearing cost and a small additional freight charge. Provided there is adequate carrying capacity and with average loss rates, fleece weight and wool prices a young wether added to the flock can contribute substantial extra wool revenue over its lifespan.

Preliminary budgets calculating the likely costs and returns for a farm buying-in extra stock, and projections for a suitable breeding unit, indicate that it may be a profitable venture for both buyer and seller.

On a different but related topic, - many farmers are keen to improve their flocks and are aware of the importance of good rams in achieving this. The operation of a nucleus flock breeding scheme, will over a number of years select the very best characteristics from your camp flocks and concentrate them in your rams. Selection of rams is of course important and a sufficiently large nucleus flock will produce enough rams to enable strict selection on conformation and fleece characteristics.

Many farms also favour buying-in some new blood. Some look to purchasing rams able to substantially improve the micron of the fleece, perhaps by introducing New Zealand Hill Merino blood into the flocks on suitable ground. Is this the route present Polworth breeders might wish to take? Do Corriedale breeders look to importing new Corriedale bloodstock too?

Asking the converse question, - perhaps there's already sufficient quality bloodstock in the Islands and that means should be found to enable these bloodlines to be more widely available through the Falklands.

Your comments would be appreciated.

Who's Who at the A.R.C.

The work of the ARC can be divided into three principal areas - Agronomy, Animal Production and Animal Health; the laboratory backs up all three sections.

Current staff are:

Tom Davies - Team Leader and Senior Agronomist. Tom is responsible for the overall work programme and administration of the team.

Richard Clemence and **Aidan Kerr** are assistant agronomists and look after the Camber and Fitzroy experimental sites and agronomy trials on farms.

Austin Davies is in charge of the Fox Bay Sub-centre; his work there includes further trials on introduced pastures and he is particularly involved in the potential of natural pasture (especially whitegrass).

Peter Maitland and **Jamie Bennison** are investigating animal production, particularly the nutrition of the ewe and young sheep.

Neil Pullan is responsible for animal health investigations, this involves several areas but principally parasitology and its effects on wool production.

Andy Douse has been looking closely at the effects of geese on pastures and how much they compete with the sheep.

Gordon Lennie provides a back-up to the agronomy section in the laboratory by analysing the pasture samples from experimental sites in terms of yield and nutritive value.

Fred Cheong carries out the laboratory work associated with the animal health programme - analysing the parasitology samples and also trace element levels in blood samples.

Gerard Robson and **Peter Collins** give assistance with the field work involved in all the trials and maintenance of machinery etc.

Margaret Goodwin helps with all aspects of the laboratory work.

Lilian Wallace and **Faith Felton** give secretarial and clerical assistance.

Also based at the Old Met Station are **Owen Summers** who is the Falkland Islands Government Agricultural Officer, **Dennis Lampard**, the Government veterinarian and **Stephen Carrington** the FIDC Farm Management Advisory Officer.

New Civil Military Liason Officer

Major Robert Freeman has taken over from Major Ian Barton as the new civil/military Liason Officer. Robert is on a 4 month tour in the Falkland Islands and will be endeavouring to meet as many Islanders as possible during his tour. He is based in HQ BFFI on Stanley 447 (or BFFI mil. ext. 2081), and will be visiting various settlements. Should any Islanders have any problems of a civil/military nature that need addressing they should make contact with him as soon as possible (he leaves early November).

Over the last few months a number of reports have been made to the military about the misuse of tracks by military vehicles, the leaving of gates in the wrong positions and farmers not being warned about military activity. Unfortunately most of these reports have not contained sufficient detail for the military to apprehend the offenders. In order that the military can deal with the culprits these incidents should be reported as soon as possible and with as much detail as possible about those involved. Military units are regularly reminded of the various rules for using farm land and moving across country.

Robert has worked hard to resolve these problems, having successfully halted B.V.'s driving through the ships names on Wireless Ridge and made good progress in organising repair of tracks etc. around the Island, damaged by the military. He has done much to rectify the problem of fences being driven over on Mount Kent farm, although the blame is far from entirely on military vehicles!

News from F.I.D.C.

GETTING AROUND THE FALKLAND ISLANDS

FIDC has the responsibility to advise the Falkland Islands Government on matters relating to economic development. We see the development of better transport and communication links throughout the Islands as critical to development outside Stanley.

However, the way transport develops can affect the pattern of life around the Islands for generations to come. We are concerned that such development should be carefully planned to try and limit adverse effects on smaller communities. For example, a road network linking the main settlements on West Falkland and on East Falkland combined with a ferry between East and West would be rapid. However, the effect on Coastal Shipping Ltd. could be fairly serious and might actually result in the withdrawal of the service. What would this mean to people living on the smaller islands?

Clearly what we need is a detailed transport plan that sets out all these effects and implications of various decisions. We have commissioned a firm of transport planners to undertake a study for us. We have asked them to:

1. Review all current inter and intra island transport systems throughout the Islands.

2. To prepare a plan for the co-ordinated development of inter and intra island transport over the period 1985 to 1995. The plan to take account of:

   a) The development of a new airport and harbour complex at Mount Pleasant / East Cove.

   b) The financial constraints on the Falkland Islands Government.

   c) FIDC's economic and tourism development plans for the same period.

Mr. Peter Prynn of Halcrow Fox Associates is the chosen consultant. Mr. Prynn is an experienced transport planner having done similar studies in similar locations. His two most recent studies were a study of the North isles of Orkney transport system and a study of transport system of the Western Isles of Scotland, including ferry services, air services and road system.

Mr. Prynn is aware of the nature of our problems and has specifically mentioned the problem of balance between concentrating on improving the main lines of communication between the larger settlements with the likely effect that this will have on outlying islands and other remote settlements. He will take great care to hear the views of all the main interested parties.

Once the report has been produced it will be studied by FIDC who will in turn present it to FIG with their recommendations for FIG to take appropriate decisions. FIG is not obliged to accept all or indeed any of the recommendations but it is believed the report will in practice be of great assistance in FIDC's and FIG's planning.

ALTERNATIVE ENERGY SYSTEMS

We are working with two farms in exploring the potential for providing power from 'natural resources' here in the Falkland Islands.

Proposals for a large wind generator to provide electricity for Pebble Island Settlement are presently being studied.

The Heathmans at Estancia are intending to purchase a hydro powered turbine to run a generator providing 4 to 7 kw of electricity depending on flow of water, 24 hours a day. The plan is to divert water around a short channel dug out next to the natural waterway.

A location is chosen offering a good drop in water height from the top of the channel to the bottom where the turbine is placed.

There is a suitable site at Estancia close to the settlement and which maintains a good flow even during dry periods. The cost of the project is expected to be £11,000 altogether.

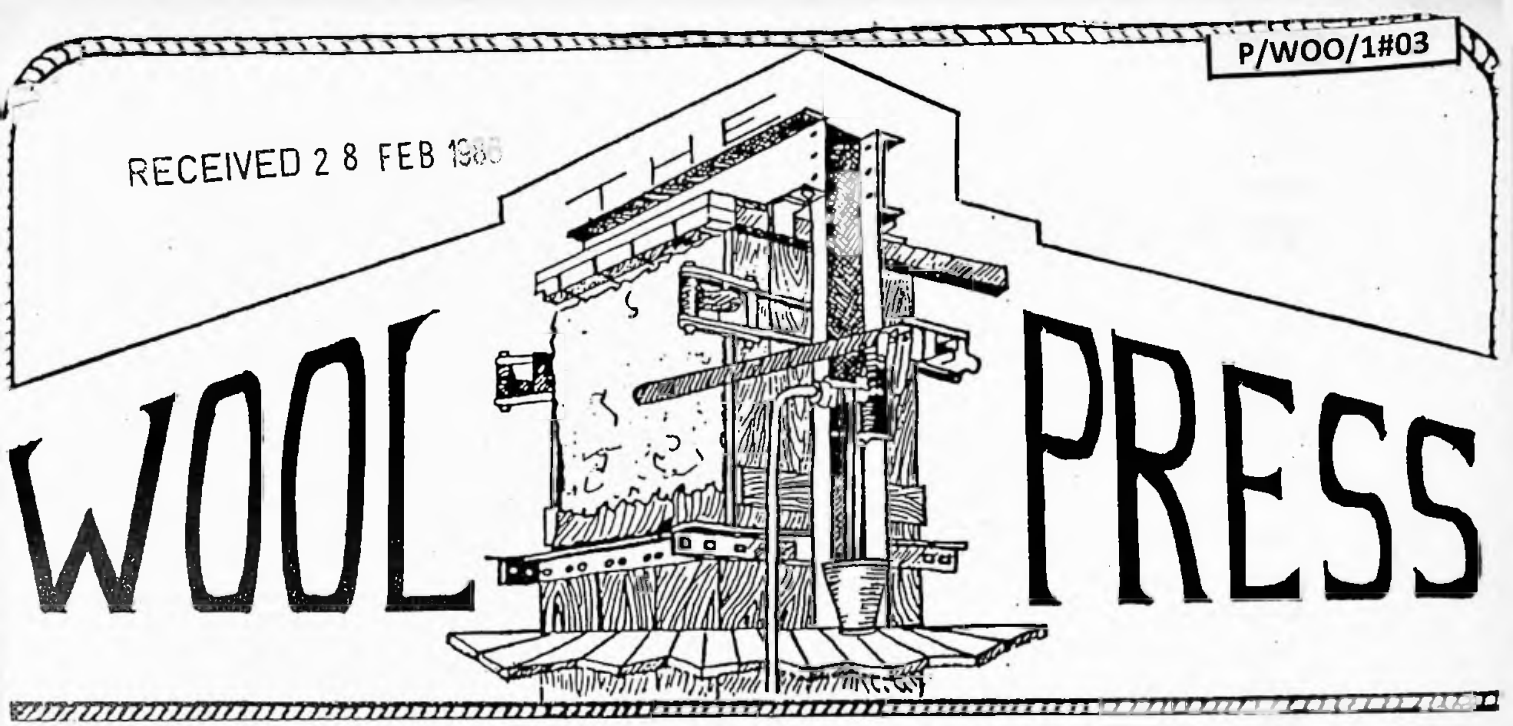
You are welcome to contact Tony Heathman or FIDC for further details. We expect assistance to be available under our land improvement schemes.

OFFSHORE FISHING NEWS

Fisheries observers working with FIDC studying the offshore fishing in waters surrounding the Falklands tell us it has been very successful this year for squid fishing. Fishing for the shortfin - the major type of squid caught, ended in June when they migrated northwards into deeper water. Some fishing continued off the mainland till late July.

Many vessels have now returned home but the Polish and Russian fishing fleets remain, catching blue whiting to the south of Cape Meredith. However due to parasitic infestation this is of a low market value. The Spanish too are still fishing for common squid and for hake, but catch rates are disappointing.

The shortfin squid season begins again in February.



WOOL PRESS

ISSUE No. 3 FEBRUARY 1986

WOOL PRICES - COULD IT PAY TO WAIT A WHILE ?

It is almost exactly a year ago since prices on the Bradford wool market touched their peak. Today by comparison sterling wool prices , over the micron range relevant to Falkland wools, have dropped some 27% on average. Finer fleeces have suffered slightly greater decline. Nineteen micron wool, whilst not important here shows a full £3 per kilogram drop from 12 months ago. The speciality characteristics and uses of Falklands wools attracts some price premium, providing a very welcome, albeit small, relief to such depressed prices.

But since January wool prices have maintained an upward trend so hopefully the worst has passed and perhaps some confidence will return in farmers minds. Movements in currency exchange rates have for the most part been responsible for the wide movement in prices. There is just some indication that exchange rates between the Australian - British currencies could be returning nearer to normality.

Meanwhile most Falklands farmers are holding back hoping the market shows at least some reasonable gains, before selling their clip. Wool shipments are likely to arrive in Bradford unsold, to be warehoused perhaps for some period of time.

Your wool freight & insurance charges cover an element for delivery and storage in Bradford up to 6 weeks after arrival at Gravesend, (charged at £17.35 per tonne last season but infact cheaper this year at £16.48). For warehousing longer than this storage is thirteen pence a bale per week and fire insurance payable at ten pence per £100 value of wool each month. In total this amounts to just less than .5 pence per kilogram wool, greasy, .7 pence per kilogram clean, each month. If the improvement in wool prices maintains at least some of its momentum over the coming months these storage chaarges will seem a small price to pay. But weighted against this maybe an over-riding necessity to turn wool into cash immediatly in order to pay farm and living expenses.

Is Whitegrass Pulling Its Weight ?

One of the largest natural resouces the Falkland Islands has is its whitegrass pastures. The 1969/70 Agricultural Team estimated that 65% of West Falkland, 63% of East Falkland and 41% of the off-shore islands were covered with pastures dominated by whitegrass.

Well over half the total area of the Falklands is therefore covered with this one grass. Is it pulling its weight? At best on most farms it will not be carrying more than the standard one sheep to four to five acres which is common throughout the Islands. It is doubtful whether it is even doing this because, as everyone who has flown over the Islands knows, sheep are concentrated in the green valleys and greens which occur in most whitegrass camps.

Detailed studies of whitegrass by ARC have shown that quite a good yield of green leaves is produced in the centre of each plant. Unfortunately the new leaves quickly begin to die-back from the tips. The die-back spreads gradually down the leaf until this becomes completely white. These dead white leaves persist on the plant for a year or more so that most whitegrass bogs consist of about 70% dead material and only 30% green leaves. The dead material hides the green making it difficult for sheep to get at the more nutritious centre leaves.

It seems unlikely that the traditional set stocking of camps will be able to tap this valuable resource. Stocking rates have been arrived at over the years by trial and error. They do not reflect the stocking potential of whitegrass but of the camp as a whole with the small better natural areas carrying the brunt of the grazing with the sheep merely taking the odd bite of whitegrass from time to time.

Many people have of course attempted to increase the stocking rate of camps. Generally this has been done by trying an extra few hundred sheep in a camp for a year or two. It has usually ended in failure and a return to the previous stocking rate. When you come to think about it perhaps this is understandable. The extra sheep were not numerous enough to have to graze much, if any, whitegrass. Rather they too made for the better grazing on the greens and in the valleys. The whitegrass stayed white. competition for the limited areas of better grass caused all the sheep to lose condition. No more wool per acre was produced. The disillusioned flockmaster naturally returned to proven stocking rates.

Does it have to be like this? Can nothing be done? Can the Falklands really afford to neglect this resource? The answer to all these questions is probably **NO.** Whitegrass <u>can</u> be changed by management.

Everyone has seen fence lines white on one side and green on the other. Everyone has seen the dramatic effect of temporary heavy stocking on holding paddocks and pens.

Small increases of stock numbers in large, set stocked camps will never be sufficient to change whitegrass into green grass. But large increases in stock numbers in small camps, variably stocked can. In these days of sub-divided farms, relatively cheap fencing and flocks of a size that can easily be gathered and moved, many things are possible. Not least among these might be management changes which will cash in on this neglected resource - whitegrass.

Ways and means of doing this will be discussed in a future issue of The Woolpress. Meanwhile have readers any ideas?

Tom Davies, Team Leader, ARC

<u>WORMS IN SHEEP</u>

This is the first of two articles on sheep parasites in the Falkland Islands.

All sheep raising countries have worms in their animals but the magnitude of the problem differs, depending on many factors. Sheep management, stocking rates and climate are all contributing factors. One of the most important points is the growth rate expected of young sheep. For instance, the control of worms is extremely important in fat lamb enterprises in countries like New Zealand and Britain.

However, we do have a problem in the Falklands in breeding enough replacement sheep and anything which adds to this has to be investigated. Also, young sheep have the highest quality wool. During the winter, nutrition for young sheep is particularly poor and it is the young sheep that are most susceptible to worms.

At first sight worms would not seem to be important. With a stocking rate of one sheep to every four to five acres there should not be any difficulty. However, everyone can see when flying over the Falklands that sheep congregate in valley and coastal greens as areas can be very high, maybe 15 to 20 or even more sheep to the acre. More people are using reseeds and grazing young stock on them at high stocking rates.

continued . . .

Two types of worms are found in the stomach and intestines of sheep, small roundworms in the true stomach and intestine and large tapeworms in the small intestines. There are also a few roundworms found in the lungs.

Tapeworms

These produce white moving segments often seen on lamb droppings during the summer and Autumn and are found as very large segmented worms in the small intestines. They are of little significance and seldom seen in lambs more than six or seven months.

Roundworms

Several types of roundworms are found at different parts on the stomach and gut. Mostly they cannot be seen but their presence results in loss of condition and sometimes scouring. This is especially so in the hoggets in the Autumn and late winter/early Spring.

Worms do not multiply in the sheep but produce enormous numbers of eggs. These pass out in the faeces and undergo development on the pasture before becoming infective for sheep. The rate of this development depends on the weather. This is the stage when pasture management is so very important. Properly managed, most of the larvae will die and the pasture made safe for young stock. The other class of animal which contributes to contaminating the pasture is the lactating ewe. They infect the grass in the spring for their lambs in the autumn.

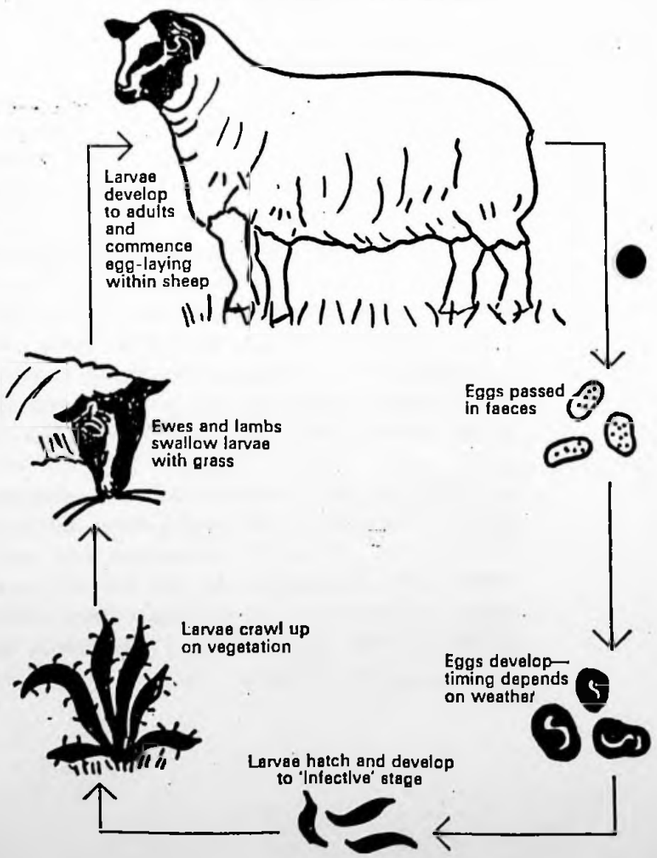
So the young animal and the lactating ewe are the contaminators of pasture but it is the young animal, up to say 19 months, that is most affected.

If we are going to give our sheep a good start in life we not only have to feed them but we have to control their parasites. We will not be able to eradicate them as we did the ked but we can at lest lessen their effect.

In the next issue of the Wool Press the degree of the problem, as it is appearing in the Falklands, will be given with suggested means of treatment and control.

Neil Pullan, ARC

WORMS IN SHEEP—THE CYCLE



FISH MEAL AS A FERTILIZER?

Fish meal used in the garden has often been said to provide good results as a fertiliser. A number of people have considered using it on the farm too.

Vessels in Berkley Sound, especially the Polish factory ships, process considerable quantities of fish meal and could be ideally situated to supply our Islands. Enquiries to these boats and to their Company offices in Poland about obtaining supplies has brought little response. Any fish meal they do sell is apparantly delivered onto the world market where the price is around US $300 per tonne (about £215).

We know something about the value of fish meal as a fertiliser from making a chemical analysis of plant nutrients in some samples of the meal processed from squid. It should be stressed however that nutrient levels vary considerably with the type and quality of fish meal and furthermore the real test of its fertiliser value is by measuring grass growth itself following fertilising with fish meal. The ARC are presently conducting trials of this kind.

But what would be a viable price to pay for fish meal as a fertiliser?

Nitrogen is generally the most necessary of fertiliser nutrients for plant growth in the Falkland Islands and the value of a fertiliser could be judged to an extent on nitrogen content. By comparison with other fertilisers fish meal provides only about 11% of nitrogen whilst nitrochalk has 26% and nitram 34.5%. So fishmeal is proportionally less valuable than other fertilisers in this respect. With these fertilisers presently costing £180-£210 per tonne delivered to Stanley it makes fish meal only worth £60-70 per tonne. Somewhat considerably less than the world price.

To apply the same amount of nitrogen to grass using fish meal as opposed to nitrochalk or nitram also necessitates something in the region of 2.5 times the number of bags being handled and spread. Also the material is so light it would necessitate waiting for an almost windless day.

SALE OF MOUNT EDGEWORTH

Congratulations to Robin Smith on his successful application to purchase this new subdivision. Robin intends calling his section **HARPS** farm.

A balanced flock approaching 5500 head will be run. There are three main camps in the section, one,Plains camp, is particularly large with rather variable terrain and vegetation, two other camps would seem to be adaptable as Hogg and Ewe grounds. The Plains house is included in the sale of the farm and woolshed and other facilities will be built there, forming a small settlement.

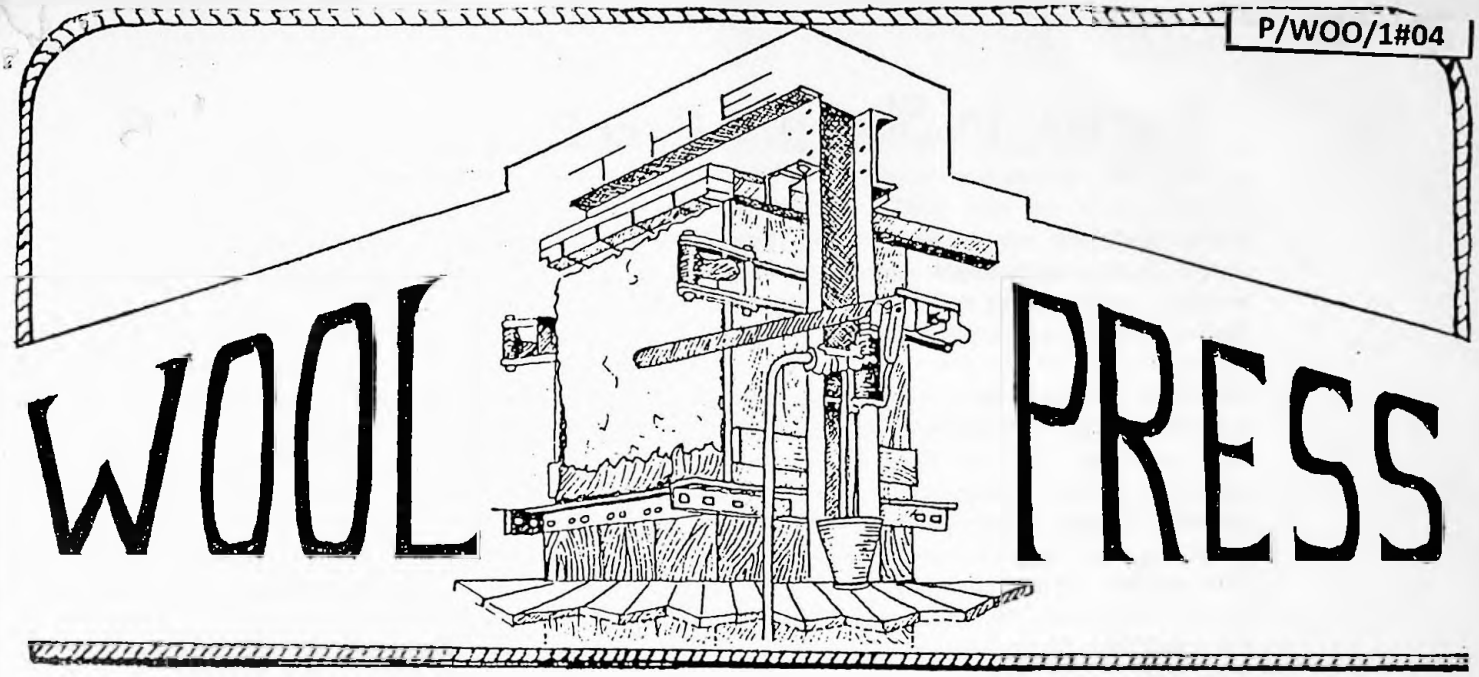
Robin was amongst five applicants interviewed at Fox Bay by an interviewing panel. This panel included farmers Robin Lee, Danny Donnelly and Nigel Knight; Simon Armstrong and Stephen Carrington from FIDC and the FIG Agricultural officer Owen Summers. Emphasis was on maintaining an informal atmosphere throughout the discussions.

Applicants were each asked about their interest and reasons for owning a farm and to outline plans for running and developing this new section. Discussion followed about how they proposed financing the purchase and running of the farm, especially how they might meet the farm's running costs prior to receiving the first wool cheque unlikely to arrive till a year from now. Opportunity was made for each to ask any questions about details of the farm and about assistance from FIDC.

A points scoring scheme was adopted by the interviewing panel, each member of the panel making an independant assessment and alloting points from information and answers each applicant provided during the interview.

Point scores from each of the panel were added together at the end. Infact their choice was unanimous and each gave the highest score to Robin Smith. He therefore became the successful candidate.

A tractor is seen as an immediate necessity as the section is "land locked" and requires supplies brought in and wool taken out overland. In this instance FIDC intends including a tractor in the purchase price of the farm, to be repaid as an integral part of the farm loan repayments. Management of Plains camp is seen as being especially difficult in its present form and construction of at least one subdivision fence is a priority and as a result FIDC has taken responsibility to ensure a fence is completed ready for next season and will again form an inclusive part of the purchase price of the farm.



WOOL PRESS

ISSUE No. 4 MAY 1986

A SECOND FARM OPEN-DAY LATER THIS YEAR

Almost 40 people responded to our invitation to the Farm Open Day at Horseshoe Bay, the majority arriving from West Falklands and so creating a major task for FIGAS through the day.

It achieved success in bringing farmers together to look and talk about wool production and grazing management, to hear and exchange individual ideas plus see at first hand the farm layout and farm stock plus choice of farm buildings etc.

The aim is to have another open day event in the coming season. Late spring or summer seems an ideal time, to take advantage of the longer days so that everyone has plenty of time to stay and join in, contribute and exchange views and ideas. Whilst this coincides with the busy period on the farm, it is hoped everyone interested will find it possible to put just one day aside to come along.

There seems some clear advantage in keeping farm open days as a one day event, avoiding for instance necessity to organise accommodation for all attending and unnecessary burden on the host settlement during busy time of the year.

Equally though it would be useful next time to incorporate perhaps a short seminar or prepared discussion on an important topic such as woolclassing or perhaps a technical farming subject or on financial management. This would undoubtedly involve extending the open day into a 2 day event.

To follow on from the first event held in the East we should very much like to hold the next open day in the West and have infact received a couple of offers from those farms.

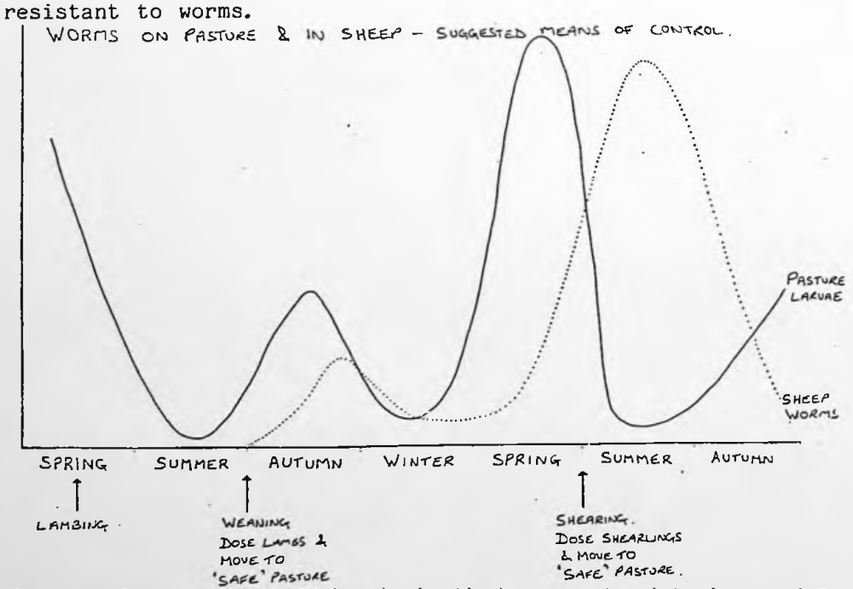
Farming practice at Horseshoe Bay principally revolves around management of sheep on whitegrass. We would look towards following a different theme at the next event, perhaps demonstrating use of a reseed in a farm system or alternatively visit a unit such as those on the far West relying on diddle dee camp for wool production.

Worms in Sheep – *Part 2*

In the first of these articles general points were made of the importance of worms in sheep, the types of worm and their life cycle. This article will concentrate on their importance in Falkland Islands sheep.

In the figure below it can be seen that there are peaks of availability of infective larvae of roundworms on the pasture in the autumn and a much larger one in the spring. In late pregnancy and especially during lactation, the worms in the ewe produce large numbers of eggs which develop during the summmer to produce the infective larvae of the autumn peak for their lambs. The higher the stocking rate in the autumn, the greater the pick up of worms at this time. For instance, if lambs are weaned on to reseeds they can pick up very high burdens indeed. Many of the eggs, especially from the worm Ostertagia, passed out in the droppings of lambs in the late summer/autumn do not develop to infective larvae until temperatures start to rise in the late winter. This accounts for the very high spring peak in infective larvae on the pasture, especially on the greens. This is also a time of nutritional stress for the hogg, so the pick-up of large numbers of larvae at this time will be very important.

The infective larvae die off very quickly as the summer comes on with higher temperatures and drying winds. However the infection in the sheep lasts until the autumn to be a source of infection for the following spring (See Figure). Autumn and spring/summer are the dangerous times of the year for the young growing sheep, say of up to 18 months of age. Older sheep tend to be more resistant to worms.



The problem in the Falklands is that camps tend to be used for the same class of animal every year and the camps used for hoggs

and shearlings become grossly contaminated and this contamination lasts from year to year. To break this vicious circle requires a basic change in young sheep management. This may be much easier to achieve on the smaller farms where there is greater sub-division of the camp. Ideally these young sheep camps should be spelled - used for alternative animals like cattle or, as in other countries, used for arable cropping. However this is not possible in the Falklands. Ewes cannot be used on these camps as they are gross contaminators of camps in the spring. Therefore the only animal we can use which will not contaminate the camps to any great extent is the mature wether.

The time necessary to spell camps to make them 'safe' for young stock would appear to be at least a year. Adopting this change in management will require an alteration in the allocation of camps to different classes of stock. But basically the camps which are used for young sheep (hoggs and shearlings) should be 'cleaned up' by mature wethers for at least a year.

Before sheep are put onto a camp, which has been 'cleaned up' and made 'safe', they should be dosed with an anthelmintic. Most of the modern anthelmintics are very effective but the more efficient ones tend to be slightly more expensive.

A practical programme for the control of parasites in young sheep should include the following strategic dosing and movement to 'safe' pasture. Lambs, when they are weaned, should be dosed and then put on to 'safe' camp. It is also suggested that when they are shorn as hoggs in November they are dosed again and put on to 'safe' pasture. This may be more difficult than finding safe pasture for lambs but in the light of the large pick-up of worms in the sheep's second summer it would seem desirable. Where worms were removed from hoggs in an experiment during the six weeks before shearing in November, this resulted in a 1.5 kilogram weight advantage over controls.

It has been proved that there is little point in using reseeds for lambs immediately after weaning, with stocking rates of over say five lambs to the acre, without worm control. Any weight advantage they gain from the reseed is lost during the winter. In an experiment where lambs were weaned on to a reseed for eight weeks and worms were controlled, they put on about six kilograms more than controls on traditional camp. At shearing this advantage was reduced to about two kilograms but more dosed reseed fed lambs survived.

Reseeds, immediately after they have been made, are free of infective larvae. Therefore any stock, and this includes lactating ewes, put on them must be dosed with anthelmintic.

The economic benefits of dosing and changing the management is still being tested but from the information available there is a definite benefit to be gained from the control of worms in our young sheep.

Neil Pullan, Veterinarian, ARC

How Can Whitegrass be made to Pull its Weight ?

In the last issue of the "Woolpress" the question was asked whether whitegrass was pulling its weight. It was concluded that it was not, in most cases at least.

The problem of finding out the sort of stocking rate that whitegrass can carry to make the best use of the green leaves it produces annually is a complicated one. ARC is attempting to sort it out at an experiment on Coast Ridge Farm, Fox Bay, by courtesy of Shirley and Nigel Knight. In the meantime probably the best maxim to work to is:-

" GET WHITEGRASS GREEN - AND KEEP IT GREEN ".

Only in this way it seems can die-back be prevented.

The first thing to do is, if possible, to choose an area of good whitegrass. Success is more likely with good strong plants of whitegrass, preferably showing signs of forming " grass bogs ".It is less likely on thin, straggly whitegrass mixed with oreob and other weeds on acid, wet flats. Consideration should also be given to the position of the chosen area for accessibility to other camps in order to facilitate moving sheep in and out. Economy of fencing is another factor to be borne in mind.

Next all dead materials should be removed. ARC research has shown that a typical whitegrass plant consists of 70% dead white leaves, and only about 30% live, green leaves. The cheapest way of removing dead material is by controlled burning, provided great care is taken to avoid setting fire to the peat or causing other damage. Alternatively it can be achieved by temporary heavy stocking. Yet another method, if suitable tractors and implements are available, is to cut the whitegrass down to the ground with a flail mower or brush cutter.

As soon as the whitegrass sprouts new green leaves, grazing must be heavy enough to keep them green. This is where fencing comes in. The area must be kept small enough to be really heavily grazed. It should not contain "greens" or "green valleys" on which the sheep will concentrate and therefore neglect the whitegrass.

It is likely that a new concept of grazing management will have to be adopted if the whitegrass is to be kept green. The regrowth will have to be grazed before die-back appears to any extent on the leaf tips. But, of course, as soon as all the green leaves are eaten the sheep must be removed. As the whitegrass begins to recover sheep must be brought in again and grazed in the same way. This may be repeated several times during the grass growing season.

One might wonder what is the point of all this sheep moving. The point is to get more sheep and better fed sheep on the farm. More sheep give more fleeces. More cash is earned by the farmer. More revenue is obtained for the Falkland Islands.

Realising that in the first instance at least many farmers would prefer to stick to set-stocking of camps, ARC's large white - grass experiment at Fox Bay is also hoping to provide figures to guide farmers on stocking rates to maintain the leaves in green condition throughout the grazing season.

Winter carrying capacity is obviously the limiting factor on Falkland Island farms. The method of grazing management ARC is working towards, will, it is hoped, by carrying many more sheep on small areas during summer, allow other areas of the farm such as greens and green valleys to be spelled, building up a reserve of grass for winter grazing so that more sheep can be carried overall.

Tom Davies, Team Leader, ARC

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Measuring Wool Output on the Farm

From the Farm Statistics produced each year by FIG Agricultural Office it is quite easy to compile a list of individual farm average fleece weights (wool per sheep) for the Falklands.

Arranging these figures together for a number of successive years provides a useful picture outlining some important differences and trends between individual farms.

Firstly, as is already quite well known, farms on outlying Islands consistently turn out the heaviest average fleece weights compared to the mainland, calculated at around some extra 9%. Comparing West and East Falklands the West achieves a slightly greater output per sheep (fleece weight) than the East, by about 4 - 5%.

Looking then at individual farms, it is seen how fleece weight clipped per sheep on any farm of course varies from year to year reflecting climatic factors. But this apart, some farms naturally always record a relatively low average fleece weight each year and others consistently a high fleece weight per sheep. Variations between farms in a single year for instance range from 3.0 kgs to 4.8 kgs within East Falklands.

Wide differences naturally exist because of: variation in type and quality of farm camps and hence available pasture grazing quality; differences in breed of sheep; then also stocking rate

(sheep per acre or hectare). Consequently it would be most unfair to judge a farm's success on results of output per sheep. However these figures, along with more detailed calculations which many farmers and managers work out from the 'bale-book' records for determining individual flock averages for example wethers, ewes, hoggs, etc do still provide some useful guidelines towards management of the farm.

Rather more important than output per sheep is total farm wool production, it having greater bearing on the financial circumstances and profitability of the farm. The level of wool production is better measured in terms of output per acre and provides a more useful indication of a farm's relative success and progress towards maximising revenue from wool. Management of the farm should aim towards improving and maximising wool per acre. As long as any extra costs of doing so do not outweigh value of the extra wool it will lead to greater farm profitability. Usually this would involve looking hard at ways to increase sheep numbers out in the camp even perhaps at the expense of some drop in fleece weight per sheep.

It is to be expected that increased flock numbers involve greater costs. Greater use of paid labour seems the major item of extra expenditure on the farm and this has been the case at Horseshoe Bay. However from farm cost information and records studied in the Falklands there is evidence that average costs of producing a kilogram of wool could well decline with expansion. Farm overheads although somewhat increased by higher stock numbers are spread over a much greater kilogram weight of wool.

At the Farm Open Day held at Horseshoe Bay it was demonstrated how efforts towards bringing about higher stocking rates and better grazing control has contributed to flock expansion and better utilisation of the land. An expansion in wool production from 1.3.kg. to 1.8.kg. per acre over the six shearing seasons the Goss's have operated the property is commendable. Admittedly some of the expansion has been achieved on partially better quality camp and farmers with rather different pasture quality and topography may be constrained to achieving a more limited scale of expansion.

Some farmers of course feel reluctant to expand, considering their camps have reached maximum stocking capacity, or they are constrained by being unable to significantly increase stock numbers or to buy-in cast sheep. Finance too may be limiting for investment in items such as fencing or to pay for the additional materials or labour necessary to accompany stock expansion.

Aims are that this and further farm open days can helpfully provide useful demonstration and offer opportunity to exchange ideas on just what methods and techniques could be suitable for other farmers to use towards developing and expanding their own camps.

A word on FIDC Training Schemes

-an important contribution to Development.

Under several new FIDC schemes anyone resident on the Islands can receive training in a range of appropriate commercial and technical skills.

Training is being organised in skills ranging from seamanship to hotel management and hairdressing to heavy engineering.

Two courses are likely to be of special interest to the farming community.

Firstly we are currently offering practical training in welding and other farm workshop skills. A qualified instructor Adam Donald, is presently providing tuition at farm workshops around the Island. Contact us if you have not yet registered your name for a course.

Secondly, we will be offering training and advice on subjects vital to all sheep farmers -
-Woolclassing & fleece preparation skills, and shearing technique.
A detailed programme will be announced shortly.

Adding value locally to the wool clip is a major aim of ours. We are doing this by developing a Falkland Island Knitwear Industry.

Recently 2 instructors, Ray and Marilyn Oliver from the Scottish College of Textiles (SCOT) arrived in the Island to provide a series of 5 training seminars in Stanley and 1 in Fox Bay Village in connection with knitting and 'linking'. 29 people attended what was generally felt to be a most worthwhile course. It is hoped to run a follow-up course next year. One knitter who attended has been given further assistance under the FIDC General Training Scheme to join an advanced knitters course at the Scottish College of Textiles.

FIDC introduced a special assistance package to help our new knitters buy their own knitting machines.

Training is also available under FIDC's General Training Scheme. The scheme will help any resident individual or group of individuals to be trained in a relevant skill either on the islands or in UK. Air fares and 50% of training and accomodation costs can be covered. If anyone is interested the please contact FIDC.