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A HISTORY OF SHEEP FARMING IN THE FALKLAND ISLANDS

When de Bougainville established the first settlement in the Falkland Islands in February 1764 he brought with him a herd of some seven heifers and two bulls, together with a few pigs and sheep, three horses and a goat.

From time to time the British brought a few animals to the Islands. When Macbride settled at Port Egmont in January 1766 he landed a few sheep on Saunders Island. Reference to these animals is made in a letter from Captain Macbride to the Earl of Egmont in 1766 "... As the Cape de Verd was in our Tract, I stopped at St Jago and got off some Goats and Sheep, male and female, to put ashore here, which I hope Your Lordship will not be displeased with."

The first attempt at sheep farming was made in 1841 by J. B. Whitington who brought out with him twelve pure bred Leicesters and South Downs. At the time of arrival of the Governor in 1842 the tame livestock in the Colony consisted of eighty-six head of cattle, forty-three horses (said to be worn out), thirty-one sheep, three goats, twenty pigs, forty-five dogs and oddments. In addition the number of wild stock was computed at 30,000 cattle, 3,000 horses and 500 pigs.

The sheep, with the exception of Whitington's mentioned above, belonged to the Government and were South American bred - part being described as "the poor long legged indifferent breed of South America" and the rest "a great improvement on the same - being a present from James Peter Sheridan of Buenos Aires".

In a despatch from Governor Moody to Lord Stanley on 14 April 1842 he commented "Such is the condition of the few sheep at present in the colony; but there can be little doubt that sheep-farming would answer well upon a large scale, as there is an abundance of nutritious pasture; the winters are much milder than in England, although the summers are not so warm; and with regard to the wetness of much of the land, there are large districts where the surface is always firm and dry enough to remove all fear of foot-rot. In nearly every allotment of land there would be both high land and meadow for alternative grazing, which is an advantage not to be overlooked. I am informed that the breeds which would be the best adapted to the climate are Leicesters and Southdowns."

In 1842 John Culy, a Lincolnshire sheep farmer, arrived with his family, a farm servant and 200 sheep, the remainder of a stock of 300 which he had purchased at Montevideo. In December 1843 the Governor reported that there were no shepherds in the Colony "The sheep graze where they please with no individual to control them; rams run always with the ewes, lambs sometimes dropped in the depth of winter and not housed." Scab had already appeared in the Colony "caught from a flock imported infected with scab, I regret to say, by a settler whose experience should have made him more cautious". We learn that Whitington lost his entire flock, including his prized importations, to this scourge.

Another attempt to introduce sheep from the Plate was made in 1845 by Whitington, Culy and Governor Moody. Nine hundred were brought down but scab again wrought havoc and a year later only 180 remained. The flock sent down by Lafone fared no better. Moody described it on arrival, after ten days at sea, as "so degenerate as scarcely to retain the distinguishing characteristics of mutton or wool". Several hundred survived and at the Falkland Islands Company's Preliminary Meeting held in London on 24 April 1851 it was noted that 159 sheep were sold to Mr Whitington at 3 dollars each in 1850.

Also in 1850 the Falkland Islands Company landed 988 sheep in fair condition at various times but as one shipment had arrived during the winter (the most severe ever known, snow having laid on the ground for some days) it had been thought advisable to sell the whole of that lot, consisting of 329, for immediate consumption. They were sold to Captain Sulivan at 12/6 each.

In 1852, John Pownall Dale Esq, the Company's Colonial Manager, with his family, a shepherd and several artisans and their families, engaged by the Directors, sailed from Liverpool in the 'Amelia' which also took sixteen choice stock sheep, and some merchandise for sale in the Colony. The Directors also chartered the ship 'Record' which took out Mr Hicks, the Company's Storekeeper, with a number of shepherds and selected artisans, accompanied by their families, also a further supply of stock sheep, and a bull of choice breed. In a report to the Board from the Chairman later that year it was noted "The total number of persons sent out by the Directors is forty-five; the number of Cheviot sheep forty-six, together with one Galloway bull, and six shepherds dogs. The sheep forwarded by the 'Amelia' arrived out in good condition."

Later in the severe winter of 1852 Dale wrote to the Directors in London an account of the state of cattle and sheep at Hope Place: "To-day I have had an opportunity of obtaining from an intelligent man, arrived from Hope Place, some account of the state of the cattle and sheep, in the Company's territory which I regret to say is by no means encouraging. At the Boca there is a flock of sheep about 260, in a poor and weakly state, a good deal infected with scab; they are now dropping their lambs. flock has not suffered much loss during the winter. At Hope Place there is a small flock of forty-six sheep with two half bred Leicester and Southdown rams, in good condition but somewhat infected by scab. They now have fifteen lambs doing well - but of the flock imported last April by the 'Flores' (about 700) and placed under charge of Mr O'Brien Metcalfe, there remains only about forty-five and these are in miserable condition with scab, roaming at large - and perhaps this is the only chance they have of life for they are too weak to be driven about. These with the sixteen Cheviots, (still doing well) form the whole of the present stock of sheep in the Colony belonging to the Company. I am advised that the ship 'Stanley Cacique' would very shortly leave Monte Video with a cargo of sheep and horses for the Peninsula. I hope that Mr Lafone may have (with the assistance of Mr Williams) formed the plan for the treatment of this cargo which will secure the best chance of success."

A shipment of 1,200 sheep made by Lafone from Monte Video was a failure, many dying in the boats before shipment. Whether this was the shipment on 'Stanley Cacique' is not apparent but Lafone was told no more Uruguayan sheep were to be shipped as losses were too great.

Sheep numbers continued to increase however and the following report was written by W. M. Dean, a passenger on the s.s. Great Britain, who visited the Islands in 1854 "... This part of the country is in the possession of the original Port Louis Company, who have about 250 sheep and a number of cattle and horses. About one half of the sheep are pure-bred South Downs, and the rest a cross between this breed and the coarse Monte Video sheep. They were in excellent condition, and the shepherd, who was recently from England, assured us that they throve as well as in the 'old country' ... There are on the Island about 2,000 sheep, (chiefly of the coarse Monte Video breed) and 30 to 40,000 cattle."

By the mid-1860s, Pebble, Keppel, and New Islands were the only West Falkland sites occupied by humans and browsed by sheep. Only on Pebble was wool the exclusive commercial enterprise. For sheep farmers, smaller islands such as elongated Pebble offered easy water transport, fencing, and control of sheep. Also, the West Falkland mainland lacked livestock except for descendants of cattle placed there in the 1830s. Perhaps because of whalers and sealers, these cattle had been less prolific than their East Falkland counterparts, despite broadly similar ecological conditions.

The first flocks were introduced to West Falkland in 1867; Mr Waldron at Port Howard was the first West Falkland settler.

Included in the Blue Book Report of 1871 is a despatch from Governor D'Arcy to the Earl of Kimberley which states "Pastoral prospects are decidedly more favourable than they were two years ago, chiefly owing to the activity and zeal of the Falkland Island's Company's Manager, Mr Cobb; the Company are now proprietors of between 40,000 and 50,000 sheep; the additional care and supervision bestowed has been well repaid, and the Company is now in a position to offer a market to the smaller proprietors of the West Falkland, who are thus saved the expense of importing their stock from the River Plate. It now begins to dawn upon the settlers that the Islands are better adapted for sheep than for cattle; this discovery was made by Mr Waldron of the West Falkland, and is now universally recognised; henceforth I imagine but few cattle will be raised, merely sufficient to feed the people on the farms, the ground being reserved for sheep walks. The short grasses of the Islands are very succulent (I do not allude to the tussac grass, only now to be found on the small islands that fringe the seaboard), and peculiarly adapted for sheep, so much so, that even under the primitive farming of the Islands the animals attains the same good condition it does in England with the aid of turnips &c. Having recently made a tour of the East and West Falklands, I am in a position to report that the settlers are contented and hopeful of their prospects, and the land in both Islands is now all taken up."

By the mid-1870s sheep farming was not only established but prospering. Successful crossing and better shepherding had resulted in a rapid growth in numbers. In the two years, 1870-2, the number of sheep jumped from 64,675 to 124,690. In the Blue Book Report of 1875 Governor D'Arcy wrote to the Earl of Carnarvon "I trust I may be allowed space to revert in resume (being on the point, after six years' administration, to give way to my successor, his Excellency Mr Callaghan) to the favourable results which have accrued from the monetary concessions made to lessees by the Government shortly after my arrival in 1870.

The sealing trade had suddenly collapsed, the sheep farmers, especially in the West Island, were complaining that the terms upon which they leased the land were impediments to their success; by lowering the rents, and otherwise making the leasing terms easier, the Colonial Government gave an impetus not only to the wool industry, but to the shipping interests. The unemployed sealers were hired as shepherds, and the Colonial schooners again got under weigh to transport over the Sound from the East to the West Island stock and materials for building. Meanwhile more capital from the Mother Country was thrown into the Islands, the Franco-Prussian war kept up the price of wool, the value of homesteads and stock rose, and young men from England purchased in as partners, taking in many instances a third share of a farm. If favourable prospects continue till 1880, four years hence, when the rents will rise from £6 to £10 for a section of 6,000 acres, the land will become more valuable when fully stocked, more labour will be required for shepherding, shearing, dipping, and boiling down, and the revenue will be so considerably increased as to render the Colony nearly independent of the parliamentary grant."

By 1877 the number of sheep had risen to 283,385. The ravages of scab were as usual very severe during the year, more especially on the Western Island although there was some improvement in this respect on the East Falkland Island. In his Blue Book Report for 1877, the Governor advised "I am informed that "dipping" sheep according to some process or another has become more general of late years I fear, however, judging from the results, it must be very imperfectly done. It seems to me to be very desirable to make it compulsory by law on all sheep farmers in the Colony to dip their flocks according to some approved process every year, and I believe that this measure would receive general approval.

The dip most in use in the Islands, and what is considered most efficacious, is the "tobacco dip". It is generally believed here — if this dip is prepared of the right strength and properly used — that it is almost a certain cure for scab. It is, however, very expensive.

An attempt has also been recently made to introduce the "glycerine dip", which has been used with great success for some years past by the sheep farmers at Buenos Ayres.

Mr Cameron has kindly given me the receipt of a dip prepared from lime and sulphur which he has used very successfully at the San Carlos Station, on the East Falkland Island, where the sheep are reported to be exceptionally clean."

The dip required 2 oz of quick lime and 4 oz of sulphur for each gallon of water and, according to Mr Cameron, "when the sheep leave the bath their wool is of a dark saffron colour; they ought to remain in the bath one minute ... I have this season dipped over 3,000 sheep twice with lime and sulphur liquid at a cost of £16.10s, whereas the requisite quantity of tobacco would have cost me about £70 sterling. The lime and sulphur dip is a certain cure for scab, and does not perceptibly injure the wool."

The Governor went on to report "I have received a very strong letter from an extensive and most energetic sheep farmer on the Western Island, who has expended a large capital on his farm, urging me to introduce a Scab Ordinance and to appoint a government inspector to carry out its provisions. As the matter is at present under my consideration it would not be desirable for me to go into it further in this report than to briefly indicate some of the difficulties connected with this very vexed question.

A large majority of the sheep farmers throughout the Islands (and those who have by far the largest quantity of sheep and land) are strongly opposed to the introduction of a Scab Ordinance, chiefly on the ground of the heavy expenses which such a measure would entail, to defray which they would have to be taxed severely at a time when they are for the most part in a struggling condition. They say also that a Scab Act would be by no means so successful in stamping out the disease as its supporters anticipate, for the following reasons.

The farms in these Islands are generally of great extent, and the boundaries between them often extend for several miles and are necessarily all unfenced, the cost of fencing being so great as to render it practically out of the question for a long time to come. Under these circumstances it would be impossible, they say, even by the most vigorous inspection, to prevent outlying sheep from straying into neighbouring farms, and thus spreading the contagion. The sheep are generally scattered bout the farms in very small flocks, some of which frequently elude the shepherds, as they would most probably the scab inspector, by hiding amongst the numerous rocks with which the Islands abound.

Moreover, it is said that the wetness of the climate here conduces to the spread of scab, and throws another obstacle in the way of effectually suppressing it.

Those who are opposed to a law on the subject are aware that it has been found necessary in Australia, but say that that is no argument in favour of its introduction, where the circumstances are so widely different as they are in this Colony, which they consider not sufficiently advanced for such legislation.

I have never received any application in favour of a Scab Ordinance from the sheep farmers on the East Island. In fact with scarcely an exception they are opposed to it. However, in the Western Island the farmers are, I am informed, nearly equally divided on the subject, about half of them - amongst whom the gentleman to whom I have already alluded is the most urgent - being in favour of a Scab Ordinance ... I think it must be admitted on all sides that scab is a formidable enemy to the prosperity of sheep farming in these Islands."

The Governor went on "All the land of the Colony has been leased for some years past and when I went round the Islands last year I was a good deal struck by the small number of people employed on most of the farms in proportion to their great extent. The number is a great deal less than one would expect to see even in a pastoral country.

I greatly fear the number of shepherds is on many farms not at all sufficient to keep pace with the increase in the flocks. If the supply of labour were not so very limited, there seems to me to be no reason why there should not be a certain amount of tillage on every farm.

... It is quite surprising, in a country where there is such a large number of cattle, that milk and butter should be so scarce as they are in Stanley and in many parts of the camp. By far the largest quantity of butter used in the Colony is imported from England, and considerably more preserved milk than fresh is used. A large quantity of cheese is also imported. The amount paid last year for imported butter, cheese, and preserved milk consumed by the small population of these Islands exceeded £2,200. There does not seem to me any reason why these articles should not have been produced in the Colony.

As far as I am able to judge, I consider it is greatly to be regretted that on leasing the land some clause was not inserted in the leases rendering compulsory a small quantity of tillage for the cultivation of potatoes, turnips, and other vegetables that the climate suits, on every section of land (of 6,000 acres) throughout the Islands. I am informed that there is a good deal of idle time in the camp at certain periods of the year, which could be profitably employed in this way.

The Falklands would thus have been rendered capable of supporting a much larger population than they do now, a larger supply of working men would most likely have been attracted to the Colony, and it would not have remained so long as it has in an almost stagnant condition. By this means the scarcity and dearness of labour, which are already serious impediments to the prosperity of the farmers, and which every year as flocks increase will be more severely felt, would have been removed."

In view of the above comments by the Governor the following note on produce, written in a report by Bishop Stirling in 1877 on Keppel Island, is interesting "Garden ground over five acres; average yield: potatoes 30 tons; turnips 6 tons. Average price of potatoes sold was £11 per ton. Cattle, about 500; sheep,

about 2,800, horses 20. The weight of each fleece was about 6 lbs; the last consignment of wool weighed 12,000 lbs and fetched in England ten pence per pound."

By 1878 the number of sheep had increased to 312,300 and if it had not been for the almost unexampled severity of the weather it is probable that the increase would have been much greater. The amount of wool exported from the Islands was 1,253,249 lbs but the average price had decreased by 2d per 1b to 7d per 1b as a result of the great commercial depression in the United Kingdom. The value of tallow exported had also increased to £4,874. number of sheep 'boiled down' for tallow was about 14,000. his Blue Book Report the Governor lamented that "considering the very high price of meat at home, it seems a great pity that some effort is not made in these Islands to preserve meat as in the Australian Colonies. The temperateness of the climate would seem to be highly in favour of such an experiment, but the want of steam communication with the outer world, which in so many ways retards the progress of the Colony is, I fear, likely to prevent any enterprise of this kind from being attempted."

The Governor continued "I may observe, that the 14,000 sheep boiled down by no means represent the number that could be annually supplied for preserving purposes. The 'boiling down' is only practised by the Falkland Islands Company, they alone having the extensive machinery and apparatus necessary for the purpose. A large number of sheep are, I am informed, absolutely waste every year on the farms throughout the Islands."

The following communication from a practical sheep farmer on the subject may prove of interest.

"I think it would be a great boon to sheep farmers here, if they could with any profit to themselves get rid of their aged and surplus stock. The actual profit of boiling down for tallow is so small after all expenses are paid, that it will not enable the farmer to go to the expense of drawing out and keeping separate the old breeding ewes, which if allowed to run with the breeding flocks bring forth lambs, which they are unable from old age properly to rear. In consequence of which, their lambs are weak and worse than worthless, as they get scab, and linger invariably about the edges of banks and sea beaches, where it is very difficult to see them when sheep are being gathered for dipping, and when sheep are dipped and return on their ground, those weak lambs that keep hiding about in out of the way places reintroduce scab, whereby the labour and expense of dipping is partially thrown away.

Having to describe how desirable it is to get rid of aged stock, I will try and explain what profit might possibly be made of them. After a sheep gets to be over four years old, it begins to grow more fat and the wool will be much coarser and lighter. Such is the case with every description of sheep, but more particularly with breeding ewes that are more or less broken down at that age.

There is an annual loss of 10 per cent among such sheep, as they are so poor and weak from constant breeding, that the least bad weather will kill them and their weak progeny.

It is well known that old ewes, if kept apart for one season from the breeding stock, will take on fat much faster than any other description of sheep, but it is impossible to keep them apart in such an open country as this without fencing. If their fat when tried down would pay for fences it would be well and good but I hardly think it would, the expense of boiling down, as I said before, being so great, although I am sure they might be made to pay a great deal better, if the meat from the hind quarters could be preserved in tins.

The hind quarters of a sheep yield in boiling down little or no tallow, therefore, the heaviest part of the animal, which is now in a manner thrown away, might be, I think, profitably made use of as an article of food. A boiling down and meat preserving establishment worked together, so that the separate portions of the animal might be made use of in the most profitable manner, would, I think, pay all concerned."

By 1880 the Governor was reporting in his annual Blue Book Report that "The whole of the available Crown lands have already been occupied on grazing leases. The Falkland Islands Company, who are the most extensive sheep farmers in the Colony, have acquired by purchase, chiefly by means of land orders, 33,336 acres of land in East Falkland, in addition to the 700,000 acres which they possess in the district known as Lafonia and its adjacent Islands. The Company also leases 18 stations in East Falkland, containing nominally 102,684 acres.

Eight other sheep farmers on East Falkland occupy on grazing leases 47 stations, containing nominally 490,000 acres.

In the West Falkland and its adjacent Islands 12 persons possess 43,609 acres of freehold land, and occupy on grazing leases 19 stations, containing nominally 968,390 acres.

The Crown land leased as grazing stations, chiefly on leases of 21 years, is nominally 1,561,074 acres, but it is supposed to include a much larger area, as the stations have not been surveyed but roughly allotted from the map of the nautical survey.

The number of sheep at the end of 1880 on freehold land is said to have been 117,700, chiefly belonging to the Falkland Islands Company and to their tenants on Lively, Speedwell, and Bleaker Islands, and to Mr Dean on Pebble Island.

The number on the leased lands of the Crown is estimated to have been 118,000 in East Falkland, and 200,000 on West Falkland and the adjacent Islands."

The disposal of old and uneconomic sheep has been a recurrent problem ever since sheep farming became an established industry and from time to time various methods have been tried. The earliest form of disposal (other than leaving the carcasses to rot on the beaches or be washed out to sea) was boiling down the sheep for tallow. The first tallow works was set up by the Falkland Islands Company in 1874 at Darwin.

In the Blue Book Report for 1880 the Governor noted "The Falkland Islands Company, whose business is well arranged and conducted, have substantial works for converting their surplus sheep into tallow. Mr Cobb, the Company's Manager, is good enough to inform me that the number of sheep boiled down by them in 1880 was 15,891, and that the weight of wool obtained by them in 1878-79 was 4,037 cwts, and in 1879-80 it was 4,572 cwts."

In 1883 a group of farmers went a step further and formed the Falkland Islands Meat Company Ltd to purchase surplus sheep from the farms and send them home as frozen mutton. A contract was made with a refrigerating ship, the 'Selembria' (this is the ship which is credited with having introduced the bluebottle to the Falklands), to put into a central farm on East and West Falkland, slaughter the surplus sheep which had been driven in from the surrounding farms and transport the carcasses to England in refrigeration. The first shipment, in June 1886, was a loss to the company. The second was unprofitable and the third a complete loss, the 'Selembria' arriving in the middle of winter (August 1887) when the sheep were beginning to lose condition and only a part cargo could be obtained. After this shipment the funds of the meat company were exhausted and the enterprise was wound up.

The May 1890 issue of the Falkland Islands Magazine, commonly known as The Squeaker, carried the following report "The 'Hengist', a sailing ship of 1,400 tons, fitted out with refrigerating machinery, is expected to arrive at the Falkland Islands in March; she can carry about 1,300 carcasses of mutton. After this voyage the 'Hengist' will remain permanently in the Falkland Islands as a receiving ship, arrangements having been made by which during the season some of the Steam Union Company's steamers will call on their way from New Zealand, about every three weeks, for what mutton or cargo she may have received. It is hoped that this enterprise will be more successful than that attempted by the s.s. Selembria in which the capital of £30,000 became a total loss, and of the eleven farms which supplied the mutton for her voyage from the Falkland Islands but two were paid."

In 1890 an attempt was made to revive the industry in a different form. Another refrigerating ship, the 'Hengist' was chartered by a number of farms to serve as a receiving vessel from which carcasses could be transhipped to steamships on their way to England from New Zealand. Two ships of the Steam Union Company collected small cargoes and the 'Hengist' when it sailed at the end of the season, took 19,000 carcasses. The animals were slaughtered on shore and then frozen and stowed on board. The two ports used were San Carlos on East Falkland and Port Howard on West Falkland. The venture apparently came to an end with the wreck of the 'Hengist' in the Straits of Magellan in 1895.

It appears that Smithfield was not particularly partial to Falkland Island (and Patagonian) mutton in those days, considering the carcasses to be too big. One shipment apparently sold at from  $2\frac{5}{8}d$ . to 3d. per lb.

In 1895 the farmers submitted to taxation for the purpose of eradicating scab. Under a Scab Ordinance of that year a tax of one-twelfth of a penny per acre was levied on all freehold and leasehold land in the Camp, the proceeds to be used entirely for the eradication of the disease. An Inspector of Stock, John Mowatt, was brought out from New Zealand to tour the Camp, with two assistants, Messrs Kennedy and Robertson, and enforce the terms of the Ordinance rigidly. Any attempts to conceal scab were punishable by a fine of £100, shepherds being liable as well as owners. Within a few years the disease was wiped out. Mowatt and Kennedy returned to New Zealand in 1898 but Robertson had married a Falkland Islander and remained in the Islands. He was appointed Chief Inspector of Stock and announced in 1901 that no scab had been reported since May 1900.

With the eradication of scab, sheep farming went rapidly ahead. In 1898 the number of sheep reached a maximum of 807,211. Romneys replaced Cheviots as the predominate strain. Other breeds had, and have since, been tried - Leicesters, Cotswolds, Merinos, Irish, Shropshire and Lincolns - with temporary success but it is the Romney, Corriedale and Polwarth that have become the Falklands' most successful wool producers.

By 1900 there was evidence that the quality of the pasture was deteriorating. The farmers suggested that the position might be ameliorated if the numerous flocks of Upland Geese that roamed the Camp were considerably diminished. Geese, like sheep, sought the best pasture. Seven geese ate as much as one sheep, said some. Others put the ratio as high as four to one. The farmers suggested that 150,000 be destroyed annually and payment made for the beaks at the rate of 15s. per 100 out of the Scab Fund.

The suggestion raised much controversy and was even discussed in the English papers in June and July 1904. The supporters of the geese argued that they manured the ground and that their turds contained valuable mineral salts, that they were a blessing and convenience to the Camp community where their flesh was a pleasing change from mutton and also represented a considerable saving in meat where large numbers of stock dogs had to be maintained during the winter months. Governor Grey-Wilson was appalled at the probable wastage of food at a time when there was much real want in England. Some method should first be found of 'preserving the three-quarters to one million pounds of food and marketing the high-class down this so-called locust-like scourge renders available.'

After much wrangling, an Ordinance was passed in 1905 sanctioning the destruction of the geese on a scale to be determined each year by the Government, payment to be at the rate of 10s. per 100 beaks. In the first year a nominal total of 50,000 beaks was fixed, 25,000 from each main island. In 1908 turkey buzzards, caranchos and Johnny Rooks were added to the list of 'vermin'

birds, 4d. being paid for a turkey buzzard beak and 2d. for each of the others. Although the collection of beaks continued for many years it has since ceased.

In 1907 the experiment was tried of sending salted mutton to Europe but it did not meet with a ready sale. A successful canning enterprise was undertaken, however, in 1910 with the erection of two meat canning factories on East Falkland. The plant was imported and operations were well under way by 1911. The two factories, capable of dealing respectively with 600 and 300 sheep daily, employed 100 men and produced 25,000 tins of preserved meat.

The Colonial Report for 1911 says "This result was more or less experimental as the factories will not be in full working order till 1912". In that year Great Britain was importing a considerable quantity of canned mutton. The canned product was evidently satisfactory, as it is noted from the Colonial Report for 1912 that "This new enterprise has proved to be quite a success. The prices obtained for canned goods were higher than in 1911, and the meat found a ready and satisfactory market in Great Britain. The report from buyers was very favourable, and it is hoped that this new industry, which should be welcomed by stock owners, will be supported by them and continue to advance in the right direction."

In 1913 the canning factories produced 5,119 cases valued at £6,470. Sixty-eight cases of extract of meat, valued at £1,700, were also exported. During 1914, 17,000 sheep were canned and in 1915 more than double that number. In 1916, the number of sheep canned again increased, principally at Goose Green, the canning factory which belonged to the Falkland Islands Company.

The following prices are quoted from the Colonial Report for 1915 -

For sheep over 45 lbs. in weight (dead weight)  $2\frac{1}{4}d$ . per lb. For sheep between 45 and 40 lbs.  $1\frac{1}{2}d$ . per lb. 3/6 per head.

Owing to the introduction of better breeding stock and compulsory dipping, the decrease in the sheep population made no difference to the total wool production, in fact in 1909 and 1913 record clips were obtained. The 4,869,275 lb. exported in 1909 was higher than the quantity exported when the number of sheep were at their maximum. In 1913 4,820,552 lb. were exported. Wool continued to fetch good and improving prices, the highest price till then recorded,  $2s.7\frac{1}{2}d$ . a lb. being paid for the 1917/18 clip, this inflated price being due to war demands for wool. There were temporary drops during the South African War and, in 1921, owing to the sudden slump from war to peace-time prices.

Although the output of wool was increasing the industry was no longer expanding with the impetus of the early years. Not only was the total number of sheep decreasing annually but the principal reduction was in young stock. The lambing percentages were poor. In 1922 the percentage of hoggets (survivals from the

previous year's lambing) to breeding ewes was 59.67 per cent. In 1923 only 46.1 per cent. The war prevented the maintenance and renewal of capital equipment and the importation of new stock. The Annual Report for 1921 painted a gloomy picture ... 'stock inbred, fences in many places in disrepair, woolsheds and wool presses out of date with little hope of replacement ... Many farms in difficulties ...'

It might be asked why, considering the fair weather and general prosperity which had marked the course of Falkland Islands sheep farming since its establishment, enabling many farmers not only to make speedy purchase of their holdings but to extend their interests in Patagonia and Chile. The reason was the emergence of the 'absentee landlord', a name used to describe not only the original settler, since retired, but others who had been brought in to help capitalise the undertaking, whose profit needs had to be met at the expense too often of the farm itself. 'absentee landlord' has been described - perhaps not unjustly as the curse of the Falklands, drawing all his money out of the country and putting nothing back, which has done so much to retard development in the Islands. Lafone was the first 'absentee landlord' and the first to whom the term was applied. There are two sides to every coin, however, and the alternative view is that the settlers who worked so hard under rough, primitive conditions in the early days were forced to retire to England in middle-age for reasons of health and family. They still kept a close eye on their farms, by reading and commenting on their managers' reports, making suggestions and visiting the Islands when they could.

In 1924 Governor Sir John Middleton made an almost historic speech with regard to the sheep farming industry at the Legislative Council meeting on 23 July.

As this speech showed so much details of the Governor's thoughts and hopes for the expansion of the industry the relevant extracts follow.

"That industry, I trust, is emerging from a period of depression which began in 1920, and the time seems opportune for considering the possibilities of strengthening it by development along economic lines and of securing its future stability and prosperity. The geological survey which was carried out in 1921 & 1922 has finally dispelled the vague hopes, which had been for so long entertained, of the occurrence of coal, oil and other valuable minerals. It has shown conclusively that the Colony possesses no minerals of economic value, and I cannot too strongly emphasise the view that we must remain dependent, as we have always been, on sheep farming. The dangers of dependence on a single industry, which is subject to serious market fluctuations, are well known and, in this case, have been amply demonstrated by our experience of the last four years. For these reasons and, with the object of initiating discussion of the problems affecting the industry, I made it my duty to collect such information as I could with regard to it, and I take this opportunity of acknowledging my indebtedness to those who are engaged in farming in the Colony for the very valuable assistance

which they so readily gave me in my task. The information, which was collected, has been embodied in a memorandum which has been laid before you, and an examination of it will shew that

- (1) The area of this group of islands, as calculated from the Admiralty Chart, is approximately 4,600 square miles and not 6,500 square miles as has been previously stated in official reports.
- (2) The climate and character of the soil are not favourable to securing the most successful results from sheep farming, especially in the breeding and rearing of lambs.
- (3) The number of lambs reared bears a low ratio to the number of ewes carried.
- (4) The aggregate number of sheep carried has decreased by 150,000 in the last 25 years.
- (5) Practically no land which is not too exposed for winter use is freed from stock for any part of the year.
- (6) The profitable disposal of the surplus stock has been a serious difficulty.

In submitting this report to the Secretary of State, I asked that advice should be sought from the Ministry of Agriculture and the Government of New Zealand as to

- (1) What research or experimental work should be undertaken by the Colonial Government with a view to securing the fullest possible use of the land and developing the sheep farming industry, and
- (2) what measures could be taken to increase the prosperity of the industry.

Both the Ministry of Agriculture and the Government of New Zealand pointed out the difficulties of advising in these matters with only a written report to go on and without first hand information. As a result of further representations made by me to the Secretary of State, the Government of New Zealand has delegated Mr Hugh Munro, who is one of the most experienced officials of the Dominion Agricultural Department and a leading authority on breeding, to carry out an investigation of the industry, and has agreed to allow Mr R. W. Carter to take up the post of Chief Inspector of Stock for a period of five years. We are greatly indebted to the Secretary of State for the steps which have been taken to bring about an arrangement of so great importance to the farming industry and also to the Government of New Zealand for the valuable assistance which it has rendered in so readily consenting to the loan of officials of its Agricultural Department.

Through the Good offices of the Secretary for Scotland and the Chairman of the Board of Agriculture for Scotland, arrangements have been made whereby the research work, which is most urgently

required in connection with the low lambing-percentages, will be undertaken by the Institute with which the name of Dr I. Quiller Rowett is associated. This institution forms part of the scheme of the Development Commission for promoting scientific research in agriculture and for securing the foundation of Research Institutes, each of which makes a special study of one branch of agriculture science. These permanent institutions insure (1) continuity of work which is necessarily of considerable duration and into which men have to educate themselves, and (2) the concentration of several men, differently trained, on the same group of problems. The ROWETT Institute at Aberdeen, has been established for the special work of Research in animal nutrition and for some time has been engaged, in connection with sheep farming in Scotland, on problems somewhat similar to those which call for solution in this Colony. The Falkland Islands investigations will be carried through as a part of the regular work of the Institute, and, to enable this to be done, it has been necessary to add to its subordinate staff. To meet the expenditure in this connection, you will be invited to approve of a grant of £250 being made to the Institute for the year 1924.

Samples of grasses from a number of farms have already been forwarded for examination and additional samples will be sent at a later date. Samples of soils from all parts of the Colony are being collected and will be forwarded without delay in order that a general soil reconnaissance may be carried out. The pathological and chemical examination of the bones of sheep and lambs will form an important part of the investigation, and the collection of the specimens, which are required, will be undertaken next spring.

Some of the problems which affect the sheep farming industry are of considerable complexity, and their investigation may be protracted. An interim report will be furnished at the earliest possible date by Dr J. B. Orr, the Director of the Institute, whose able work in this branch of Scientific Research is well known, and he will later advise whether the investigations, in which he is keenly interest, should be continued. In the event of it being found to be of practical advantage to continue the work, it is proposed that a further grant of £250 should be made to the Institute in 1925.

You will be invited to approve of the grant or grants to the Institute and the expenditure in connection with Mr Munro's visit to the Colony being defrayed from the Land Sales Fund, which at present amounts to over £180,000 and which, in addition to being a Reserve Fund in case of emergency, is at the disposal of the Colony for its development.

I hope that the recent substantial and somewhat unexpected increase in the market value of wool may permit of measure being taken for carrying out farm improvements which have been deferred. It is within my knowledge that, in the case of some farms, considered schemes of improvement, involving relatively large expenditure, will be proceeded with at once. In other cases an in present circumstances, this may not be possible and, in the absence of a Bank in the Colony, a measure will be

submitted for your consideration authorising loans for farm improvements from the Land Sales Fund to an aggregate amount not exceeding £30,000. The rate of interest will be 4 per centum, and the period of repayment 10 years.

Whatever be the improvements which may be carried out in the future, I consider that they will fail in attaining their full effect unless accompanied by co-operation among the Farmers, and perhaps in no branch of the industry is this more important than in the marketing of its products. It is possible for the individual Farmer to market his wool, which must always be his principal source of profit, but evidence is not lacking that one of the chief obstacles to the disposal of surplus stock to the best advantage has been the absence of co-operation. The export of live sheep has made irregular and uncertain contributions to the aggregate receipts. For a brief period in abnormal conditions a canning factory absorbed a large proportion of the surplus sheep, but it was compelled for financial reasons, to discontinue its operations, when a favourable market for its products ceased to exist. The records of the industry show that, from the earliest period of its history, the custom of disposing of the surplus sheep of each farm independently and separately has enforced the adoption of the wasteful process of reducing valuable food to tallow. Although this has at time proved profitable, it has long been abandoned, I believe, in other sheep farming countries. I venture to suggest that a more certain and advantageous outlet for surplus stock is required and that it may possibly be found in the establishment of a refrigerating factory. In the interests of the industry and with the object of encouraging co-operation, which I regard as essential to the prosperity of the industry, I am prepared to recommend to the Secretary of State that the Government should contribute in a substantial measure towards the initial cost of a refrigerating factory.

You will be glad to know that endeavours are being made to induce the Companies, whose ships pass close to these islands on the voyage from New Zealand to England, to allow their vessels to call here periodically, in order that opportunities may be afforded for importing stock and merchandise from that Dominion."

At the end of his tour of inspection, lasting eight months or so, Mr Munro wrote the following recommendation "An Experimental Farm should be established with the least possible delay and in order that it may be partly self-supporting, I suggest that a small flock of stud sheep and a herd of stud cattle should be carried. The surplus sheep and cattle would find a ready market and would certainly help to raise the standard of quality of the stock of the Colony."

He further recommended to Government that "Experiments that should receive first attention are:

- (1) Re-grassing hard camp by surface sowing.
- (2) Growing roots and other forage crops on an extensive scale, especially turnips, swedes, cabbages, rape and oats.

- (3) Making use of stock licks if they are advised by the Director of the Rowett Research Institute of Aberdeen, as a result of the investigations which he is carrying out.
- (4) Draining a limited area of water-logged land and, after it has settled, surface sowing part and cultivating part."

Mr Munro also wrote that the farm would be worked as a commercial enterprise with a strict system of accounting for monies, stores and produce. It could become self-supporting after three years.

The area that was recommended by Mr Munro was Lot No. 5, Port Louis, which was in the process of being purchased by the Falkland Islands Company to whom the lease of it had been transferred by Mr Packe in 1922. An agreed exchange for this area was effected between Executive Council, on 28 August 1925, and the Falkland Islands Company, who received in return the Government Reserve of 3,000 acres in Section B. Darwin Harbour, and 2,224 acres in Port Sussex. Council also recommended and agreed that the name 'Anson' for this new area be adopted, the name had previously been chosen for the Capital of the Colony if it had become permanently established at Port Louis.

From the minutes of the Legislative Council meeting held on 29 July 1925 we find "The establishment of the Government Experimental Farm, recommended by Mr Hugh Munro in his "Report of an Investigation into the Conditions and Practice of Sheepfarming in the Falklands", was agreed on the motion of the Hon G. J. Felton."

In a letter to the Crown Agents on 31 October 1925 it was anticipated that receipts on account of The Land Sales Fund would more-or-less cover the estimated expenditure necessary. £17,000 was voted in the first place. Agricultural implements and a Ferrier wool press were ordered from New Zealand through Dalgety & Company.

In 1926 the 164 sheep selected by Mr Munro on his return to New Zealand were imported. Mr A. J. Ashworth and family came from New Zealand in February 1926, as manager, followed in February 1927 by Mr Faithfull and his wife; Mr Faithfull to be in charge of agricultural operations.

In addition to the sheep from New Zealand, Aberdeen Angus cattle, two Ayrshire heifers and a Clydesdale stallion were imported from Scotland in April 1926. Ten tons of Nauru phosphate came from New Zealand at a landed cost of £75.13.0. An order for the following shelter belt plants was also placed in New Zealand in July 1927:

500 Tawhine Plants (a scrub growing about 4 feet high) 500 Manuka Plants 500 Gorse Plants A quantity of seed of the Blue Gum tree.

On 4 April 1927 Legislative Council voted a further £7,000 for the Farm giving a final estimate of £24,000 as follows:

Buildings, furniture and fittings	9,050
Fencing	2,800
Jetty	400
Dip	200
Implements, tools, carts, etc	1,300
Livestock	3,210
Maintenance	6,040
Contingencies	1,000
	£24,000

These figures were to cover the project costs for the first three years and was quoted by the Acting-Governor as commencing on 1 January 1927 and being defrayed from the Land Sales Fund.

Sir Arnold Hodson was appointed Governor in 1927 and shortly after his arrival wrote to the Secretary of State saying "A grave error of judgement has been made throughout in the conception and the establishment of the Experimental Farm. My predecessor seems to me to have reached an entirely wrong conclusion in his estimate of the position and to have been encouraged in his error by councillors equally ill-advised. Primary responsibility, however, for the eventual establishment of the Experimental Farm must rest with Mr Hugh Munro. I do not desire in any way to challenge Mr Munro's knowledge or experience of farming in New Zealand or in other parts of the world. Nevertheless the fact remains that he was in the Colony for about eight months and I submit that he had neither the time nor the opportunity to formulate authoritative views on so comprehensive a subject as the sheepfarming industry in the Falkland Islands."

Sir Arnold also makes a rather astounding assertion when he says "The Report in my opinion contains much that is open to dispute but it contains also the fatal suggestion that the way to salvation is to be found through the establishment under Government auspices of an experimental farm which shall teach their business to men who have given their whole lives to farming in the Falkland Islands."

And so the Experimental Farm was closed down for good virtually as soon as it came into being with the livestock and agricultural machinery sold off by auction in April 1928. 'In the interests of public economy' was the reason given in the Annual Report that year, though how public economy could be served by closing down a non-profitmaking enterprise before it had properly embarked on its work is rather hard to determine. Quite apart from its long-term value to the Colony, the experimental farm, with its varied development schemes, would have been of tremendous help in the lean years of unemployment only just ahead.

Mounting wool prices were, however, obscuring the need for immediate action. In 1925 the price had risen to 2s.5d. a lb. But nothing could obscure the high annual stock wastage. The

farmers disclosed it in their returns to Government and, from these, Governor Henniker-Heaton prepared a statement which was circulated to the farmers in 1933, during the height of the depression. In the ten years 1923-32 the number of sheep unaccounted for was 842,953, approximately 85,000 a year or 13.7 per cent of the total stock of the country. This number, Government reckoned, could be cut by half and a saving made of £17,000 (sheep estimated at 8s. each), by putting the unemployed on to ditching and draining the land, to the lack of which farmers were attributing most of their losses.

In 1937 Mr Wm. Davies of the Welsh Plant Breeding Station, Aberystwyth, was engaged to make examination of the pastures. In many respects his report implemented that of Mr Munro, particularly as regards the necessity for resting the pastures, and the inadvisability of burning camp other than soft camp.

"The decline in the stock-carrying capacity of the pastures", said Mr Davies, "and therefore of pastoral wealth is still proceeding. The time has come when the Falklands must consider very seriously whether the present system of grassland farming (which he described as 'nothing short of large-scale ranching') is to continue or whether a complete change of methods involving a policy of grassland improvement, together with a more intensive system of pastoral agriculture is to be put into effect."

The war broke out before positive action could be taken. However the Agricultural Department continued its experimental work on grasses which Davies had suggested.

By 1945 the total number of sheep on the Islands had dropped to 619,449. Sheep 'unaccounted for' during this year numbered 79,782, of which 28,022, or  $38\frac{1}{2}$  per cent, were under fourteen months old. The average loss, during the war years, 1940-5, was 20 per cent between lambing and marking and 19.67 per cent between marking and shearing. Farms were, however, very shorthanded during these years because many men were called up for the defence of the Colony.

The price of wool reached its lowest, 6d. a lb., in 1933. After that there was a steady rise and in the pre-war season 1938/39 the price went up to 1s.3d. a lb. During the war years the price was controlled by the Ministry of Supply who took the Islands' entire production. Up to 1942, 11.218d. per lb. was paid, after that year, 12.9007d., or a rate which, worked out by the Agricultural Department, averaged 6s.9d. a sheep or 1s.6d. an acre.

With the removal of controls after the war the average price of wool rocketed: 2s.9d. a lb. in 1949, 5s.6d. in 1950, 8s.9d. in 1951, 3s.6d. in 1952 and 4s.8d. in 1953. Wages rose from £5-£8 a month on the outbreak of war to £20-21, including a variable cost of living allowance, in 1953. Profits soared and the farmers prospered beyond their dreams. Farms, which were in debt and had been heavily mortgaged during the Depression, became established, flourishing and rich.

Some of the prosperity was ploughed back into the farms to provide better housing and amenities to draw and keep labour on the farms but they were to remain, with one or two notable exceptions where real and successful attempts were made to improve the soil and carry out extensive drainage systems, much as Mr Davies found them.

There was also a drop in the annual stock wastage. In the six years 1946-52 there was a  $2\frac{1}{2}$  per cent drop on that for the decade 1923/32 but the average total was still staggering, approximately 68,000 out of a total sheep population of 598,000. According to J. P. Oliver, Agricultural Officer in 1953, internal parasites increased rapidly owing to the deprived state of the pasture and much lamb mortality was caused through their eating worm-embryos encysted on young grass. Losses were also being caused by woolblinded Corriedale ewes leaving their lambs and then being unable to find them again.

In 1947 the Colonial Development Corporation, after making an investigation, offered to finance and build a freezer. The Government accepted this generous offer and a site, centrally situated on Falkland Sound, was chosen at Ajax Bay in San Carlos Water, East Falkland. Work commenced in 1949.

The venture suffered from inadequate planning and general mismanagement, aggravated by the local difficulties of shortage of labour and poor shipping facilities. The little island steamer could not carry the heavy traffic to Ajax Bay and delays were frequent. The siting of the freezer on a stone run made erection difficult and costs doubly heavy. It was not until 1953 that the freezer, which had cost nearly half a million pounds to erect, was ready for occupation.

As with the experimental farm, there had been a great deal of local opposition to its erection and the response in the first season was poor, only 14,000 sheep being sent in, mostly "the oldest and poorest, normal cullings after dipping ... no attempt made to fatten them ..." Thirty-nine per cent were rejected. During the second season (1954) 16,000 sheep were sent in. These, too, were of poor quality. In 1955 the venture was wound up.