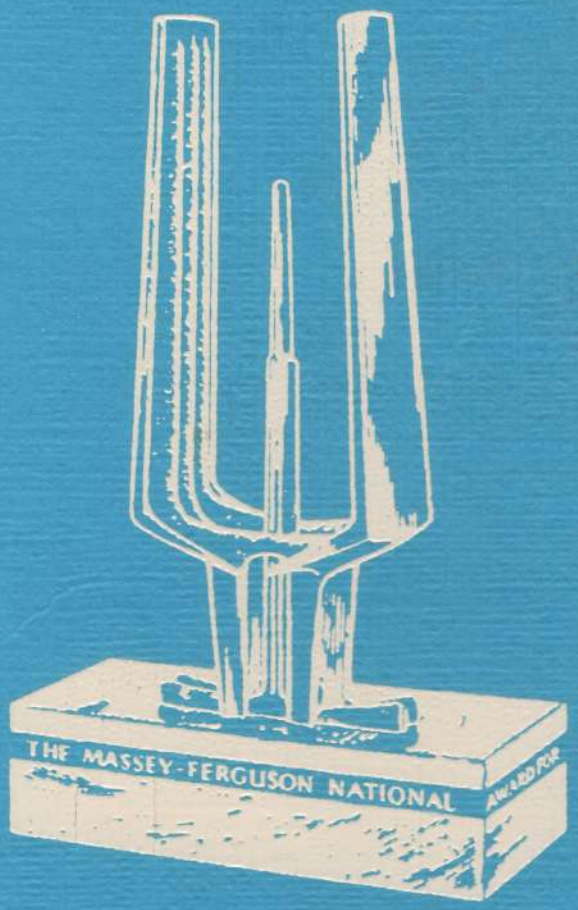
The Luing Breed

Denis J. Cadzow
O.B.E.



The Massey-Ferguson Papers No. 8

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1968	NO AWARD
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1972	CADZOW BROTHERS DEVELOPMENT OF THE LUING BREED
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Chapter 1

Introduction

Only one new breed of cattle has been developed to boost beef production in the cold, wet corners of the world, and that is the Luing, developed by the Cadzow brothers on Scotland's west coast.

The three brothers, Shane, Denis and Ralph Cadzow, born in 1913, 1916 and 1923 respectively, were all brought up as farmers in the true Cadzow tradition. Very seldom does one find a Cadzow very far from agriculture—hence you never hear of one as a millionaire!

Shane farms at Kilpunt, Broxburn, West Lothian, the original home, which has been in the family for many generations. On leaving school, he went to Cambridge and gained a B.A. He served in the Royal Scots during the war and was awarded the M.C. On demobilization, he returned to his farm at Kilpunt. This farm has some of the best land in Scotland, land which will grow excellent crops, and fatten stock. It is now mainly devoted to growing grain and fattening cattle. Over the last few years a pig breeding and fattening unit has been developed. The business is now run by Shane's son, Nigel, who, like his father, is following on in the farming tradition. Shane's second son, Patrick, manages Caddleton Farms, in Argyll, which has 200 Luing Cows on it.

Denis farms at Duncrahill, Pencaitland, East Lothian, which was originally rented by his father in 1931. On leaving school, and after working at home for a period, he spent a year in Patagonia working on estancias. In 1972 he was awarded his O.B.E. for services to agriculture. Grain and cattle fattening are again the principal lines of farming here. A Beef Shorthorn herd, which has been in existence for 25 years was sold in 1970. It was felt that the Luing was able to give a better performance, and with the good results that they were giving other breeders, it was decided to sell the Shorthorn herd. Denis's eldest daughter, Sally, until her marriage in 1974, had been secretary of the Luing Society since its inception, and his second daughter, Joan, looks after his farm office and helps with the Luing Society work. The youngest, Nora, took over as secretary following Sally's marriage.

Ralph farms at Inland Pasture, Scremerston, Berwick-on-Tweed. This is a first class arable farm which again specialises in grain and beef. On leaving school he went straight into farming, and after the war travelled extensively in Australia and North and South America. Apart from actual farming, he is now actively engaged in meat marketing, and is chairman of a very progressive company which sends large quantities of meat to the Continent. His two sons are still at school and have yet to make the big decision of whether or not to follow the family tradition.

The brothers could not have had a better farming upbringing that that given by their father, James Cadzow. Of his expertise in stockmanship, he had no peer, and his ability to know stock and evaluate them gave his sons a wonderful example to follow. Natural stockmanship such as his truly makes the modern system of attaching figures and indexes to live-stock performance appear an unwarranted caper.

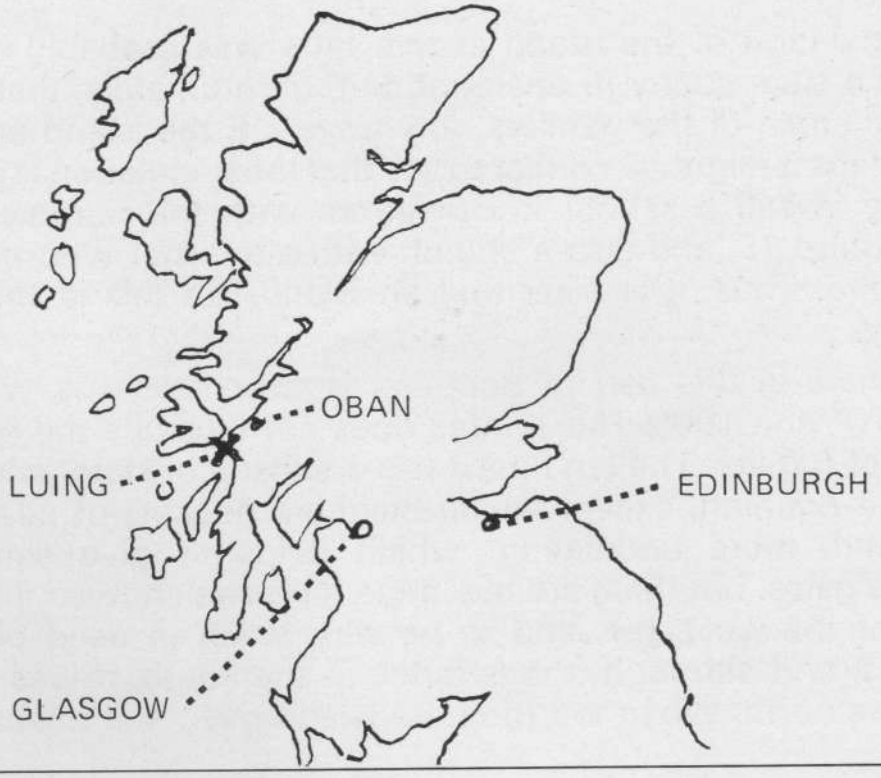
Thus the three Cadzow brothers each had their own farm on the east coast, all of them operated individually and on their own account, but all producing the same products, grain and beef. These were farms on good land that grew good crops and fattening grass and required a consistent inflow of store cattle. It is still a basic rule with them all that livestock must tread the arable fields.

The 3 Cadzow brothers, l. to r. Ralph, Shane and Denis.

Traditionally store cattle, mainly from Ireland, were bought throughout the year and fattened. This continual buying and selling of cattle meant one was always working on a margin and it went very much against the grain to be for ever giving "Paddy", the Irish cattle dealer, a fair chunk of the margin. Cattle fattening in those days was commonly called a Mug's game. There was very little profit in it.

Accordingly, we three decided to try and buy some hill land, in the north or west of Scotland, to breed cattle for our east coast farms to fatten. Land in these areas, at that time, was comparatively cheap, but it was not until 1947 that, by chance, we heard that part of the west coast island of Luing was for sale. After a remarkably painless bargaining, we purchased 2,000 acres of the island, which is placed in the archipelago between Oban, Argyll and Jura. Thus our dream child was born—to breed the type of cattle we want, take our own weaned calves down to the east coast farms to fatten, and send up some winter feed from the east coast—where it could be grown cheaper—to feed the cows in winter. A new project, and really quite exciting. Our first objective was, therefore, achieved. To marry the arable farm to a hill farm always did

THE LOCATION OF LUING



sound logical and we still do think so. They are both complementary to each other, each supplying the other with some of their production line, and thus cutting out the middle man. Perhaps this new enterprise would at last turn our cattle side of the business into a viable proposition. This remained to be seen.

The 3,800 acre island of Luing was made up of the 2,000 acres on the southern end which we had just bought, and four other smaller farms, and a croft at the north end of the island. The total cow stock at that time would be about 200, and all were inwintered. They were mostly of mixed parentage. The sheep stock was Blackface, some bred pure and some crossed, and the lambing percentage would be about 75%.

Communication with the island, which incidentally is about 15 miles west of Oban, was a passenger ferry boat across the 300 yard Cuan Straits. Any goods or animals had to be taken by MacBrayne's steamer, which called occasionally at the pier. Once or twice a year we booked the steamer to take our lambs and calves to Oban, where they were either sold at the local market or entrained for the east coast farms. Thus, it was not possible to move one's goods at the slightest whim. This, however, is now vastly improved, with a vehicle ferry which operates for loads up to 13 tons gross, but it is still necessary to get 'puffers'—the small local coasting vessels—to call with lime or any large bulk loads. Operations have to be planned rather more than when farming on the mainland.

The population of the island at that time was probably about 180. There was a slate quarry in operation but, unfortunately, that has since closed and some of the workers now travel off the island each day to work. Perhaps it might be correct to say that the population is now about 130. There is still a school in operation, with the number of pupils varying around 15, and also a church with a minister who travels from the mainland. Thus, it is clear that an island like this is very much a community.

The climate in this part of Scotland is extremely wet, with rainfall between 70" and 100". This rainfall does not facilitate the building up of a bank of fertility. The land itself has a subsoil of slate, which makes it fairly free-draining, except where there are pockets of peat. It is not high ground, more undulating, which helps to give some shelter against the gales, but there are few trees. Analysis showed, like most of that part of the west, the land to be very much in need of lime and phosphates, and although it was fertile in the south, it was steep and rocky in the north. When we took the island over, soil husbandry was poor.

Despite all these drawbacks, we felt that Luing was the right type of land on which to build a commercial breeding herd on which to raise calves reasonably cheaply, and land which could grow grass if it was fed.

The history of Scottish farming shows that farmers work hard on the poorer land on the west of the country, and amass some savings. They then move to the bigger farms on the east coast, where they compete very easily with the east coast farmer, who has grown lazy. After making their pile there, they then move south to Norfolk and Suffolk. We were swinging the trend, and we wondered if profits would reverse also.

Three of the six bulls that were sold at our first Sale. Their docility can be noticed.

Chapter 2

1947—1950

With the very high annual rainfall on Luing, it would be taxing one's imagination to say that in the early summer of 1947 we suffered severely from a drought. Being a free-draining slate soil, that part of the country cannot stand a long period without rain. We walked into such a period with a vengeance. Lambs were lost by the score as the milk went off the ewes and we could do nothing about it. Prospects were not so rosy. However, it is an ill wind that blows nobody any good. We managed to get 120 acres of very good hay made and felt ready to face the winter.

Having just taken over a mongrel herd of cows—Angus, Shorthorn and dairy mixtures—from the previous owners, we had to turn our minds to the kind of cattle we were going to breed to meet our peculiar requirements.

Going back a hundred years, the then Marquis of Breadalbane had built a large byre with ties for 200 cows. It is interesting that this byre, built in the middle of the last century, was as up to date as any modern byre erected today. There was air ventilation in front of each cow, running water for drinking and running water for washing down the grip and this went into a huge underground tank. From this tank it was taken in iron pipes about half a mile across a big flat, with points for spreading the effluent. There is really very little new in farming, it is merely presented in a different manner.

This byre had been continually used for inwintering the cow herd, right up to our coming to the island. However, it was our intention to out-winter all cattle. This was for two reasons. The cows that we took over with the land were badly affected with tuberculosis, and we considered that the byre was the prime offender. Secondly, we intended to have a type of cow which could live in Nature's shed and not require pampering inside.

At that time we had been fattening in the Lothians Beef Shorthorn x Highland suckled calves bought in from suckler herds where the Shorthorn/Highland cross female was the traditional suckler cow, put back to the Beef Shorthorn to breed the suckled calves. They were good steers to fatten and the heifers appeared to have the attributes we were looking for. Many of these cattle came from Jack Cameron of Glenfinlas, a man we admired both for his stockmanship and his foresight in cattle breeding.

At the back of our minds at that time we wanted to breed our own cow herd combining three factors: ability to stand the environment of the west coast; ability to produce a calf a year; and ability to be self propagating—or breed its own replacements. For the island could be used to breed beef females which could also, at any time we wished, be put to a terminal sire for production of even more beef—but we had not thought as far ahead as that in the beginning in the early '50's.

In 1947 we had 50 first cross Shorthorn/Highland heifers, bought from Mr. Cameron, Mrs. Lees Milne of Mull, and Douglas and Angus Estates; herds which we knew had consistently bred good cattle over the years. Perhaps it was not entirely coincidental that we had those heifers on hand! For several years we had been hoping to get a breeding farm, and we had always bought a few of these cross-bred heifers so that we might be ready to start our breeding operation as soon as we had brought the land.

Just a word of background on the two parent breeds making up this useful cross. The Beef Shorthorn of the old type, had been used for many years all over the world to improve beef production. Its most important characteristics were its adaptability to various climates and its good muscular development allied to early maturity to produce well-marbled beef. They were still big rugged cattle over 20 years ago.

Highland cattle are probably an almost pure descendant of the earliest domestic cattle in the British Isles. They were bred for hardiness and longevity to survive the long hard Scottish winters and, although the breed is slow maturing, it also produces a good side of beef. The cows are not too big, capable of foraging for their food, docile and good mothers.

The Beef Shorthorn of the old type made a wonderful combination with the Highlander, the second cross with the Shorthorn was even better. The two breeds appeared analagous to each other. There are certain things in breeding that cannot be described scientifically, but observation will tell what is happening. This is where stockmanship and modern scientific breeding must learn to complement and respect each other.

We had the 50 heifers, but could not decide what bull to use on them. Some said an Angus would give a fine second cross, others that the Hereford was popular. But although we might have got more weight from the Hereford cross, we should, I am sure, have lost a certain amount of milk in the female. And this milk was vital, for the cow had to rear a strong calf to seven or eight months with no extra feed available to it.

So we had second thoughts—for the first two years or so we turned to the Beef Shorthorn for our second cross on these heifers and the 180 mixed cows we had inherited.

The results were satisfactory, both on the steer side and with the heifers. We had no regrets. All were similar in type, they fitted into the environment, the steers gave good carcase weight and quality, and what we saw of the heifers up to mating time, we liked. Needless to say, the cow herd was outwintered.

The first two or three years on the island also had to be spent on other activities. Being an island community, we found ourselves responsible for a bus service, for supplies of butcher meat, milk, coal and for various other services which are very necessary, but not profitable. Fences, buildings and the land too required a lot of expenditure, apart from the stock improvement. We started by bringing lime by puffer to improve the pasture and right the soil acidity to encourage the better types of grasses to grow. What a transformation this made to the stock after a couple of years! We followed the lime up with slag, or mineral phosphates, and thus one can really work wonders on moorland vegetation. The quality of our product, the weight of the lamb or calf, increased dramatically as basic feed—grassland—improved, as well as the fertility of the ewe, with our lambing percentage improving every year. "Feed the land and it will feed the stock" is the old saying. I think the old boys were right. We did not re-seed the land because the existing mat of vegetation prevented poaching where cattle were out all winter. The balance of fertilisers and rotational grazing also gave the good grasses a chance to grow back again.

One backward step we took during this development period was to over-lime a particular hill one year. We then discovered that about 30 cows out of 60 were not in calf. They had never come in season because of the excess of lime, causing an imbalance of their mineral requirement. One must make haste slowly! It was two years before they all came back to their proper breeding cycle.

Many new drugs and vaccines were now coming on the market for the control of animal parasites, and we started to make considerable use of them. Liver fluke was one of our worst enemies both in sheep and cattle, because of the wet pockets of ground, ideal for the carrier snail. Tick-borne diseases such as louping ill and redwater, were all with us on this west coast island, as well as the common types of stomach worms and many others.

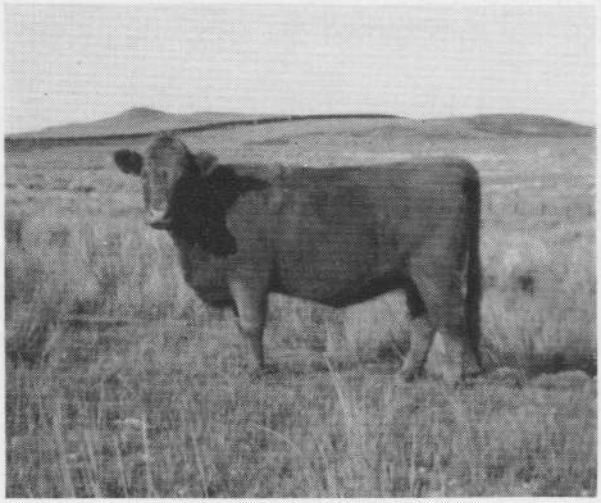
The cattle health programme on the island now involves the dosing of the herd against liver fluke three or four times a season, depending upon the fluke infestation. And for worms, the young cattle are dosed two or three times a year, while the cows are treated about once a year. To control lice which are a problem and can mean considerable financial loss through unthrifty cattle, we find the spray race invaluable and we regularly run the herd through it.

One reason for breeding our own replacements on the island is to breed a herd with considerable immunity to tick-borne diseases such as louping ill and redwater, two conditions which are difficult to treat. Bought-in cattle would go down straight away.

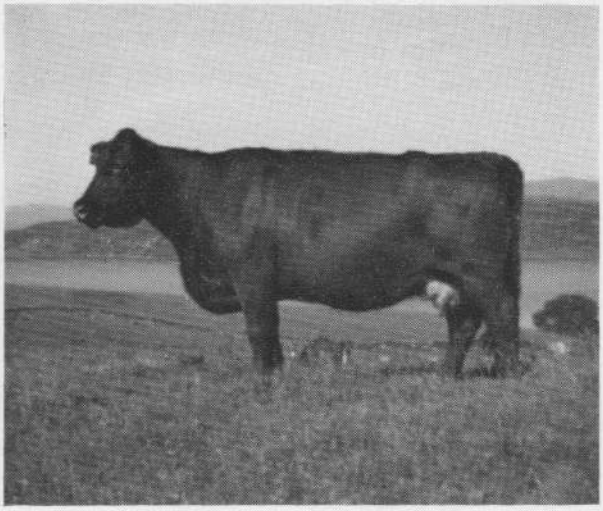
Clostridial diseases can also be a problem on the West Coast of Scotland as they are in many parts of the world. This is where a calf's worst enemy is another calf, and accordingly, dispersion is the order of the day. Despite the huge bills we paid the drug firms for medicines to control these troubles, we owe them or their discoverers a debt of gratitude. With these controls all was possible.

The records of the Luing Breed would be sadly wanting if it was not stated at this stage that the islanders, having had a suitable time to assess this infiltration of the Lowland Scot, were giving us, Cadzow Brothers, the fullest and most enthusiastic co-operation that anyone could give. This is a co-operation which has continued to the present day, without abatement, and always with unstinting willingness. Our new ideas of outwintering, making grass sileage and land improvement, were enthusiastically accepted.

Management of the cow herd on Luing is simple—basically these hardy cattle are good foragers, for that is what they have been bred to do.



Modern yearling heifer.



Young modern cow, with good type of udder.

Luing Buzzard—a typical 3 year old bull—stature measurement 57½".
Sired by Luing Monarch.

Winter feeding, apart from what they can forage for themselves, is silage. This is made from in-bye pasture sown with a ryegrass/timothy mixture. The silage is carted out to the cattle on the hill and to ease the tractor driver's lot, we have, over the years, built 10 miles of farm roads on the island. Cows receive about 40 lb. silage a day and 2 lb. per head of concentrates, which carry magnesium as a prevention against hypo-magnesaemia, or grass staggers.

We feed through to May when the young grass starts to grow, although the herd actually calves outside in February/March. Calving percentage (percentage calves weaned related to number of cows put to the bull the previous year) is about 91 per cent. By the time the young calves are demanding more milk, the grass is through and the cows are milking well. No creep feed is fed to calves in the summer, and they are weaned in September/October at around $4\frac{1}{4}$ cwt. and taken to the East Coast farms for fattening.

Chapter 3

1950/61

By 1950 we had more or less settled into farming on the island, and we had a number of second cross Shorthorn/Highland cattle on our hands.

We took another look at our objectives. Commercial beef breeding in the British Isles usually involves a crossing operation, with the breeder buying in his herd replacements and selling off all his heifer calves with the steers. We decided this would not suit us. Because of the peculiar conditions of the island we must have stock acclimatised to the area; that is born and bred there. This meant breeding our own replacements. Also, you can continue to improve the cow herd through breeding, a thing you cannot do by buying in. We were also worried about the introduction of disease if we bought heifers in.

The other consideration was that we wanted a straight line of production, with the cow herd breeding steer calves of one type to suit our fattening system and also the butcher. The butcher also wants a guarantee of type, quality and uniformity in the steers he bought.

It was obviously uneconomic for us to keep our own herd of Highland cattle to produce the first cross, which in turn had to breed the second cross female for herd replacements. So, the only answer was to try to fix the type which we had already obtained with the second cross Shorthorn/Highland animal, and establish a second cross breed. To do this, we would need to keep a second cross bull and the Shorthorn father of this cross bred bull had to be absolutely correct in every way.

Such a bull, "Cruggleton Alister", we procured from a master breeder, Bertie Marshall of Stranraer. He had all the necessary qualifications we were looking for. He was the old type of Shorthorn—plenty of size and scouth (a wealth of ruggedness), with good feet and legs, and all the other attributes which one looks for in a sound bovine. Coupled with this, he had character. This is difficult to define. It is not measurable, but it is something which enables an animal to print his likeness on his offspring in 90% of cases, producing them like peas in a pod. The son we selected was named "Luing Mist".

Perhaps Luing Mist may be likened to 'Monkey', the founder of the world-famous 'Santa Gertrudis' breed—a Shorthorn/Zebu mixture. Monkey was also by a Shorthorn. Great credit to the Shorthorns. Their influence in world beef production in the last 100 years must have been fantastic.

We would, therefore, like to give all credit to the two parent breeds, the Beef Shorthorn and the Highlander. The fleshing qualities of the former and the hardiness and stamina of the latter, with the untold qualities and characteristics of both, welded together so smoothly to make our breed. We have since consistently tried to keep only the truly commercial attributes required in this modern day and age.

Luing Mist was mated to his half sisters, producing most satisfactory offspring, both male and female. At this stage, we began to think we were perhaps starting to get our production line going.

Mist's heifers were beautiful roans with a good mossy undercoat. They had plenty of length of body, without dropping their loins, a good head and muzzle and carried the head well on a fine female neck. Their legs were well placed with good flat bone and excellent feet. Temperament was good and they appeared to winter easily. When they came to motherhood, they performed well and produced an excellent calf. It sounds like a breeder's dream, but it was true.

This little bit of initial success made us all the more determined to try to 'fix' the type. We wanted to breed pure and straight from this point.

During all the next period, we had the fullest help and co-operation from the Department of Argiculture, and the Secretary of State, in being allowed to work with cross bulls, as they were called. To their foresight in allowing this, great credit is due.

But we still had no thought in calling this a breed. We did, however, think that, with the satisfactory results we were getting, that perhaps the Highland Cattle Society would consider a suggestion which had been previously put to them, that an infusion of Shorthorn blood into their breed might achieve the same satisfactory results as we were getting. To this suggestion, the reply, emphatically, was "No".

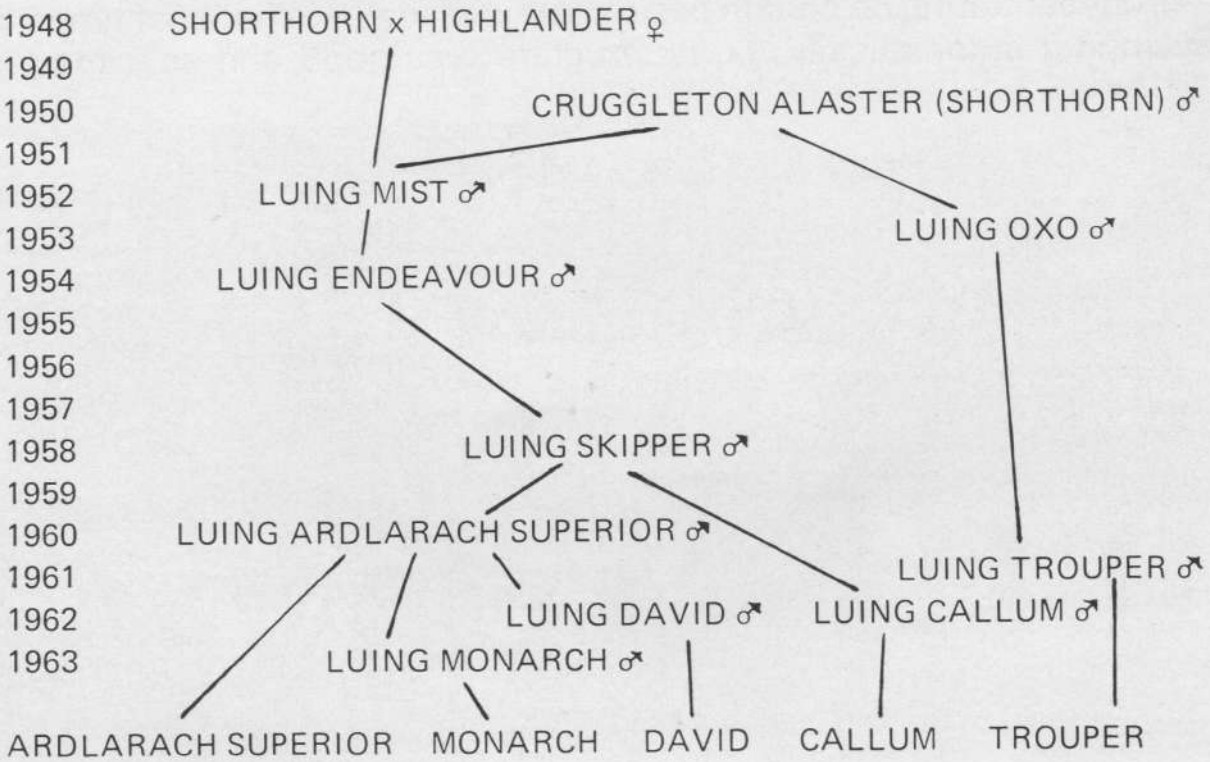
This was perhaps the answer we needed. Go it alone and we will create this into a breed—a truly commercial breed—a breed of cows that can

live on the uplands and hills and still be able to produce a potentially good beef calf, under many adverse conditions, encountered throughout the world—a breed which is self-propagating and thus self-contained—a breed which will fill the greatest want in beef production today, the need of a suitable range cow which can be bred pure or crossed.

Here was something to aim at. No cattle breeder ever reached his ideal, or ever will. There is always another horizon beyond, more exciting than the one already attained.

Undoubtedly, this initial in-breeding had started us on the right road. To speed up multiplication we therefore kept a second son of Cruggleton Alister, Luing Oxo in 1953, and mated him with his half sisters. From there on, we line-bred from these two female herds from which today's cattle are descended.

SCHEMATIC LINES OF DESCENT OF EARLY "LUING" BULLS



John E. Rhind 1973

In 1954, 17 of Mist's heifer calves were kept back, and they were the start of the long road towards the fixing of a type. Mist and Luing Endeavour—another bull calf born from half brother/half sister matings —were used in the herd until 1958, when an Endeavour son, Luing Skipper, and another Alister son, Luing Oxo, were introduced.

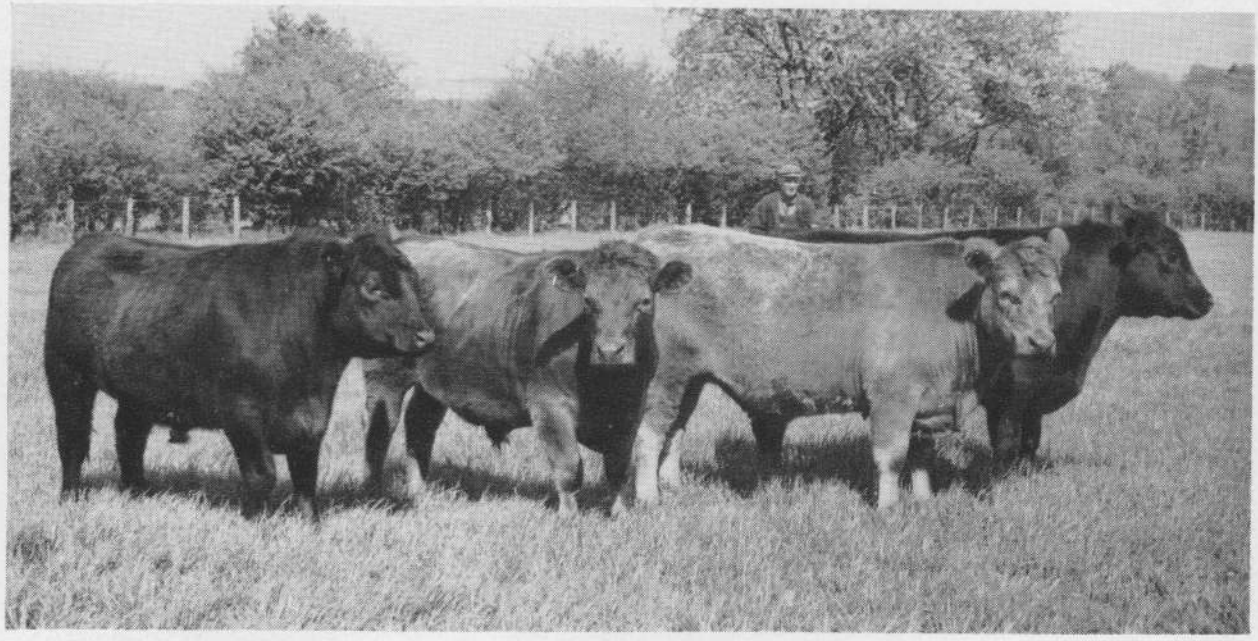
Some bulls were used on their half-sisters before they were moved on to another section of the herd. Thus we established a pattern of in breeding, followed by line breeding, together with strict culling.

By now, we had 40 or 50 cows of each line, which soon seemed to multiply up to 200 cows. But they were still only outcrosses of the original females if you went back three generations.

Cattle breeding is extraordinarily slow work. One can only make haste slowly, but it is perhaps all the more satisfactory when one sees a bunch of 70 or 80 identical calves. This was what we were beginning to breed in the '50's.

I cannot emphasise too much that every characteristic of our cattle had to be of commercial value. These were cattle for our own use at that time and they had to pay their way to prove to us they were better than any other breed as a suckler cow or a beef producer.

During this early period in the evolution of the breed in the 1950's, we were concentrating on certain basic characteristics. Similarity of type was developing automatically; bone structure was good and so were feet



An example of what Luing bulls can do when crossed with black and blue-grey cows. These 18 month old steers weigh 1,052 lbs.

for getting about on the island. We had, however, to eliminate certain cows who took more than their share of food to winter. We generally found that one line of breeding was responsible for this and we sold them off, although cows of this line were exceptionally good milkers and always had well nursed calves—usually amongst our tops— but these cows began the winter far too lean. One needs a happy medium milker. If she is too good then she costs far too much to winter; if she milks too little, then the calf suffers.

Below are listed the qualities which we considered essential in our cow herd, and if any animal did not measure up to these standards, it was not retained.

(1) Ease of wintering outside and low cost of maintenance—no cow being kept more than two winters if it required extra rations.
(2) Weather instinct—the ability to find shelter in coarse weather.
(3) Docility.
(4) Regular breeding for 9 to 10 calves or more. Cows to have a 98 per cent conception rate.
(5) Mothering instinct and ability to make a reasonable job of their calves; correct udders; milk to produce a good calf at weaning.
(6) Correct conformation.
(7) Ease of calving. (Cows calve naturally to stay in the breed; caesareans are unknown).
(8) Foraging ability.
(9) Correct feet and legs.
(10) Longevity (some cows are still breeding at 16 years of age).

By adhering to these qualities, we laid the foundation of today's breed, for from 1951 to 1953, we selected only about 30 per cent of the heifer calves for breeding. However, from 1954, about 40 per cent passed our demands—they had to outwinter well and breed strong calves.

Bulls, meanwhile, were still only assessed subjectively on type, conformation and breed character including that of their dams. I shall discuss our breed standards later.

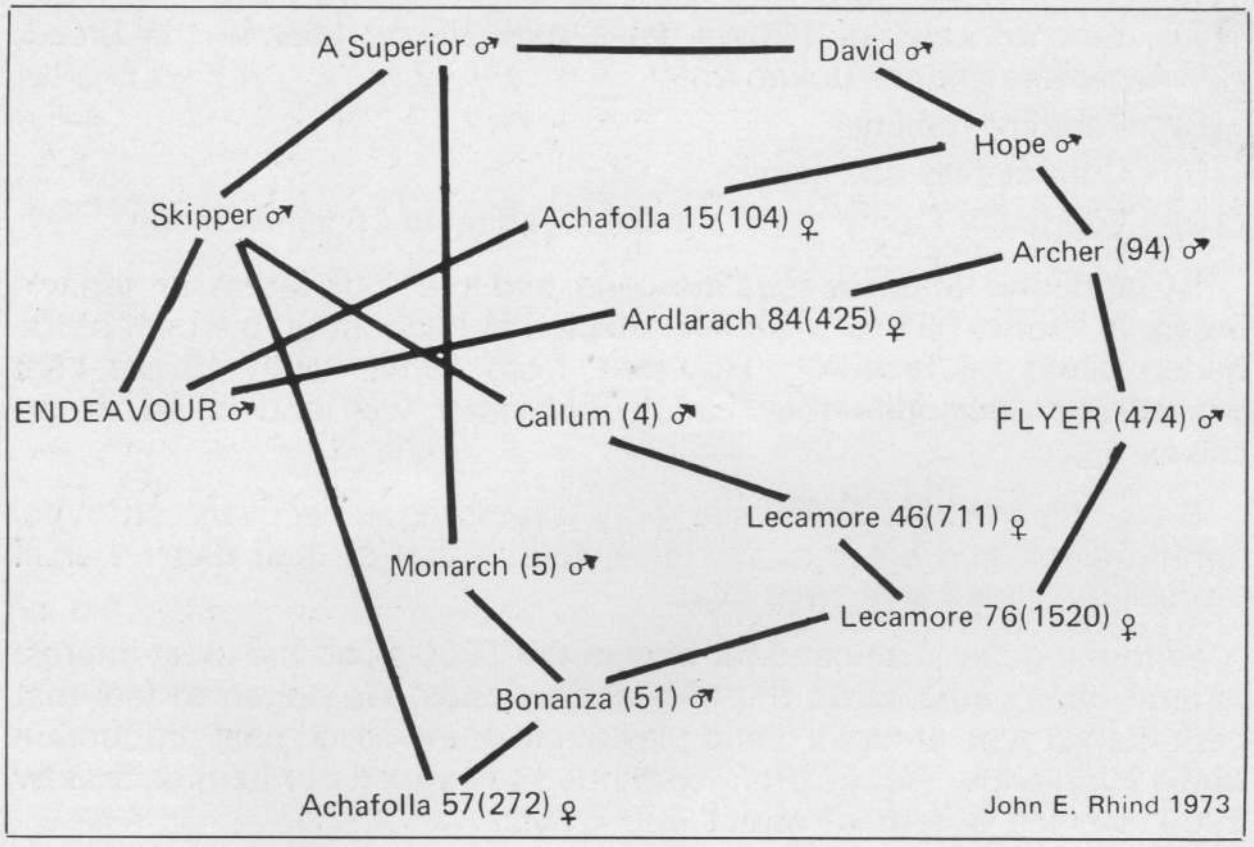
With the general demand for beef in the 1950's and the great interest in land improvements on the hills and uplands, we began to feel that perhaps our type of cattle could play a role in increased beef production in the Highlands. We therefore continued to expand our herd so that by 1964 we had a herd of about 400 cows.

We then managed to purchase the rest of the island—the north end—after the retirement of the other farmers, and the continual need for land improvement on these areas took up our attention. Our original cow herd was able to supply extra females with which to stock this land.

Previously we had fenced off four divisions in the south of the island as separate stock rearing areas, each carrying its own families of cattle and sheep. The northern acquisition gave us three more areas. Eventually each division, or hill, carried a self-contained bunch of about 75 breeding females and a ewe flock—each area measuring about 500 acres.

Each cow family was bred to a certain bull from a certain line of breeding, so we built up seven families each named after its own division, so Bardrishaig hill was home of the Bardrishaig family. The family bred its own female replacements, and gradually developed its own particular characteristics. This we have maintained, for a breed that cannot find within itself blood lines with which to correct faults which may occur, or produce an animal suited to the changing requirements of new production systems of the consumer, will, I believe, founder. In this way, we have avoided the danger of stereotyping the Luing.

THE PEDIGREE OF LUING FLYER



The family system works like this. (Remember the cows stay in their own families for life). Each year in May and June one of the senior stock bulls is used to serve half the cows in a family. The other half is covered by yearling bulls of the same line of breeding. To avoid in-breeding, the male lines covering a certain family are changed every four years.

While sorting out the breeding lines we did not forget that one aim of the programme was to produce steers to finish on the east coast arable farm, and of course there was interest from the Scottish colleges of agriculture in live weight gain and costings of steers. This is particularly relevant in 1974 when few farmers are finding they can afford grain to finish their cattle and are turning back to 18-month systems producing beef off grass. Luckily the Luing steer will finish intensively out of cattle courts, or extensively off grass, as we found for ourselves.

Shane fattened a group out of courts to weigh 8 cwt. 3 qr. at 15 months. What we normally do however, is to bring the young calves down after weaning to the east coast and put them onto stubbles with about 1 lb. per head a day of cereals, with a little hay or silage as we go into winter. Some are yarded in December, others stay out, but are stored for the winter on silage and about 1 to 2 lb. per head of grain a day. During this time, they will put on about 1½ lb. gain a day. But as soon as they get onto the spring grass the Luing steers gallop away, making the most of compensatory growth to put on 2½ lb. to 3 lb. a day, and we sell them from August onwards at a weight of 8½ to 9½ cwt. at 21 to 23 months of age. As they have eaten little more than 3 to 4 cwt. cereals over the whole fattening period, I reckon they are cheap cattle to finish.

Each year we sell hundreds of Luing steers by telephone, at so much per pound, carcase weight. This is because our customers know what they get from our production line, without seeing them.

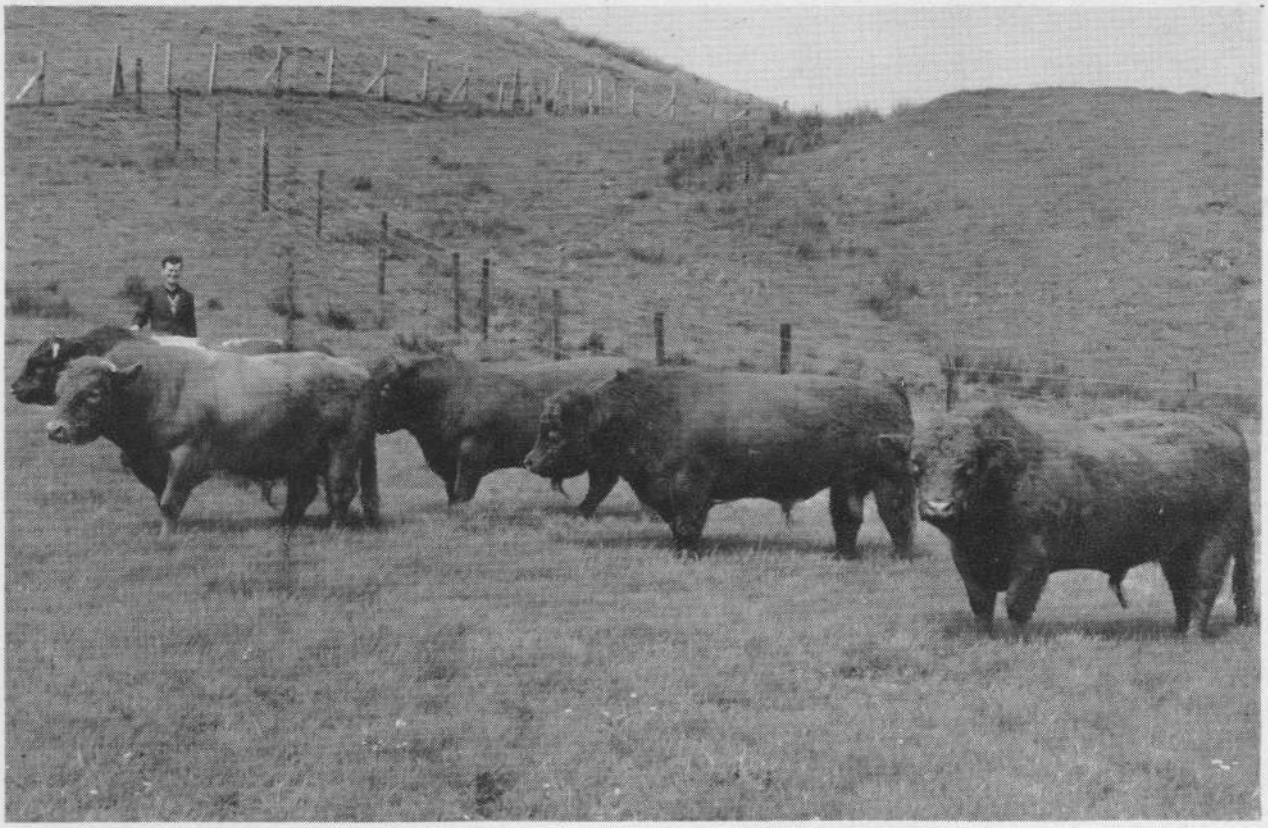
In the winter of 1970/71, the East of Scotland College of Agriculture tested some Luing steers. One bunch of 53 were fed from October to May. In the 224 days and on a ration of grass silage and limited barley supplement, they gained 2·32 lb. a day from 573 lb. to 1,092 lb. at killing. Again reports were that the farms and the market were pleased.

Another happy customer is an Essex farmer who started to use a Luing bull on his Friesian heifers for easy calving. This he got, with lively fast growing calves. These are summered at grass and at nine months go into yards where they are fattened on barley straw, sugar beet tops or silage and a few pounds of oats or barley. At 14 to 15 months, they are slaughtered at 9½ to 10½ cwt. to kill out at 60 to 65 per cent with a good eye on the rib. This customer also commented on the good food conversion of his Luing crosses which required less feed than Hereford/Friesan crosses and did not have a tendency to get fat.

Chapter 4

1961—1966

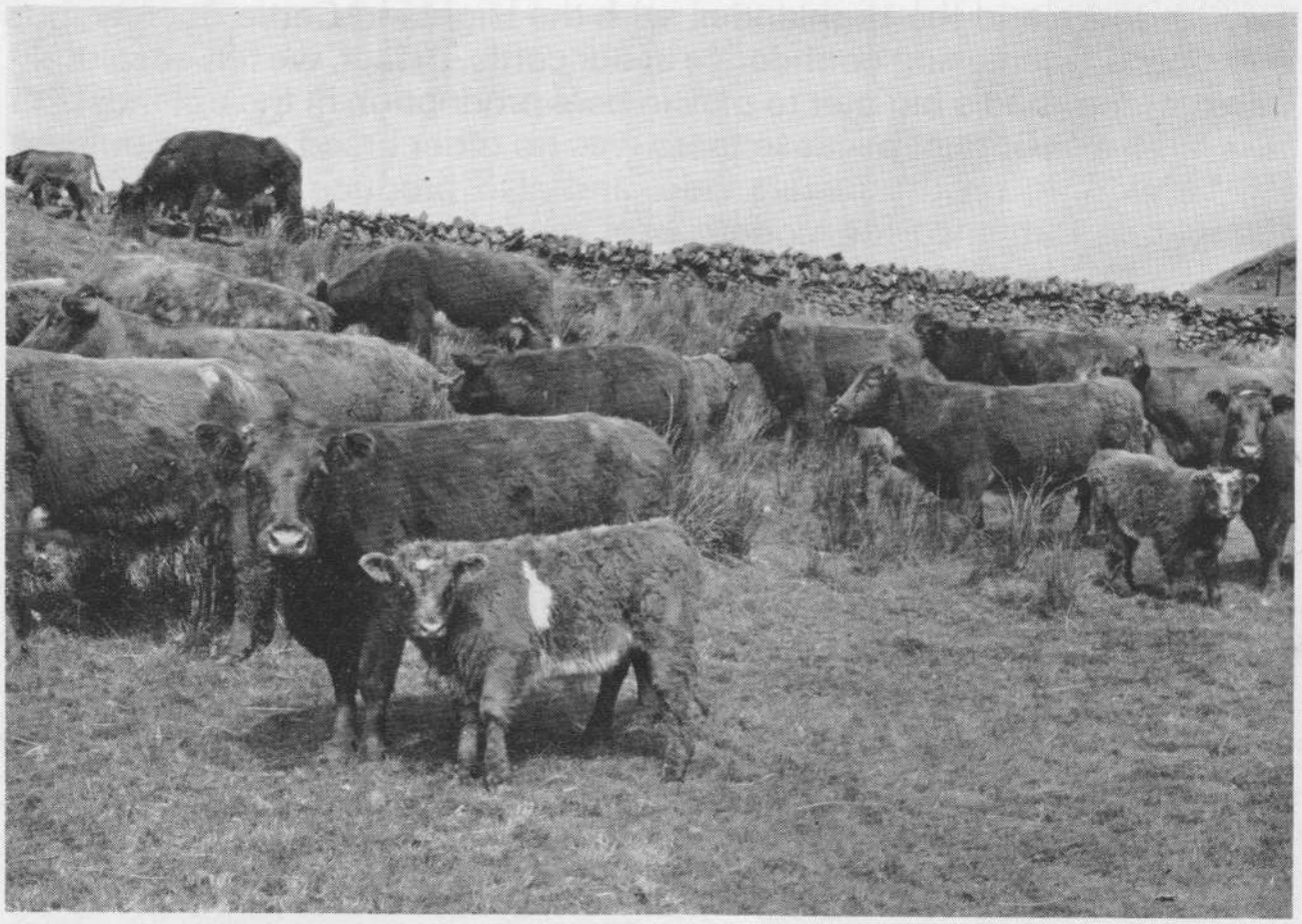
In the early 1960's, we were developing and building up our herds, and many of our cattle were now four generations by Luing bulls. We had been refused co-operation in a breed improvement scheme involving the Shorthorn and the Highlander, with the Highland Cattle Society, but we now had increasing confidence in our cattle. In fact, we felt absolutely sure that they had a big part to play in beef production in the uplands and hill country of Britain, because there was no other breed which could be self-supporting on the female side, and also produce a steer with an efficient performance for modern beef production. But we were not a breed, we were not allowed to sell bulls, because in the eyes of the Law they were cross-bred. How to become a breed ? That was the riddle.



Type of Luing bulls used in 1965.

Throughout this period, the Department of Agriculture for Scotland had been given annual reports on the performance of our so-called cross-bred bulls and had also, on occasion, inspected the cattle, seeing cows, bulls, heifers and steers, and the results of the performance tests of the latter—in fact the whole production line. We realised that they were well satisfied.

Perhaps then, if we "Took the Bull by the Horns" and gave a full-scale demonstration of all our cattle, and publicly asked to be recognised as a breed, it might be a lot easier for the Department of Agriculture.



Cows and calves, shown at the demonstration.

Accordingly, in January, 1965, we decided to hold this demonstration on the 25th May, 1965. Under the searching eyes of over 150 pedigree and commercial breeders and feeders, invited from all over Scotland, along with representatives of the Department of Agriculture and the press, we showed over 400 cows, calves, heifers, bulls and steers—the whole production line, followed by Luing beef for lunch. It rained solidly for 2 weeks before, was beautifully sunny on the day, and poured again for the next week—a very good omen, surely!

Without a doubt, the cattle looked impressive, and Mr. Stephen Williams of Boots Farms Limited, hailed the cattle as a great achievement, and said that no time should be lost in recognising the breed. We received a wonderful Press and full backing from them for recognition. This was, in fact, what happened. After various investigations by a committee which represented all British breeds, the decision to recognise the Luing Cattle was arrived at on 26th October 1965. It is a great tribute to our fellow farmers, representing other breeds, that they gave us their whole-hearted support.

The following Press notice was issued.

> "Following a prolonged study of the breeding performance of the cattle developed over the last 17 years by Messrs. Cadzow Bros. on the Island of Luing, Argyll, the Secretary of State has accepted the recommendation of the Licensing of Bulls Advisory Committee, that the Cattle should be recognised as a distinct beef breed. The Breed will also be recognised in England and Wales."

On 1st July, 1966, this was confirmed as a statutory instrument before Parliament.

Thus the Luing Breed became official and a Luing Cattle Society quickly followed in 1966, and so yet another milestone was passed.

Two rules of basic thinking we put into our statute immediately:

(1) No competitive showing, but demonstrations—yes.

(2) No bull to be sold at a Society Sale until he is 20 months old.

The reason for the first was that we considered that prize winning can be 50 per cent of the ability of the cattleman and only 50 per cent breeding. Therefore, it is not benefiting the breed—it is more often than not a measure of good management and stockmanship.

As for the second rule, it meant that the customer had a much better chance of seeing how a bull is going to develop by the time he is 20 months old, after all we were aiming to sell bulls to the commercial beef producer for breeding.

The Luing was to be a commercial breed, bred for a truly commercial outlet—no showing or show fads, only commercial usefulness was to be its measure.

Chapter 5

1966—1972

We appreciated that the road ahead, now that we were out in the open, would not be easy. Criticism would be plentiful, but would surely keep us on our toes. Opinions on cattle are always varied, even amongst the most expert of cattlemen, and if one can sift the good from the bad, it can help one to see one's own short sightedness.

It must be remembered that we were running our whole enterprise on a commercial basis, no pampering or undue individual attention. It was on this basis that we approached our first sale, held at Oban, in March, 1966. We felt some trepidation, because we were showing our cattle in natural condition, not the fat condition associated with pedigree sales. However, the sale of six two-year old bulls and 55 heifers went with a bang.

Since then, numbers have increased and, generally, price averages have been very satisfactory.

		Bulls		*Heifers*	
1966	(6)	£735. 0. 0.	(55)	£134. 13. 0.	
1967	(20)	£619. 10. 0.	(88)	£87. 6. 10.	
1968	(27)	£329. 3. 10.	(83)	£123. 7. 10.	
1969	(33)	£386. 5. 5.	(98)	£131. 5. 0.	
1970	(36)	£579. 0. 0.	(123)	£141. 9. 0.	
1971	(45)	£291. 1. 8.	(109)	£151. 5. 1.	
1972	(39)	£537·80	(160)	£194·28	
1973	(57)	£786·97	(216)	£266·05	

After the first few crops of calves came in from new herds and their breeders, it was realised by us that we must try to increase our size. Many of the herds of cows to which our bulls went, were suffering from the effects of having used small type, dumpy, bulls of other breeds for several generations, and with the increasing demand for more growth in the steers, our bulls would have to be even bigger and growthier. These small type, dumpy, cattle were too early maturing, which meant they stopped growing at too small a size and put on fat at too light a weight. With the

present demand for lean beaf, one must sell cattle before they get fat; therefore, you require plenty of growth potential in a steer, and market him before he reaches maturity. This slight change in the Luing Breed was not too difficult. Our cow herd had, in its genetic pool, cattle which could give this increased stature. Our Society decided to bring in a minimum stature measurement for bulls of certain ages, and unless they achieved this, they would not be registered and evidence of slaughter or castration must be sent to the Society for those bulls which have been rejected.

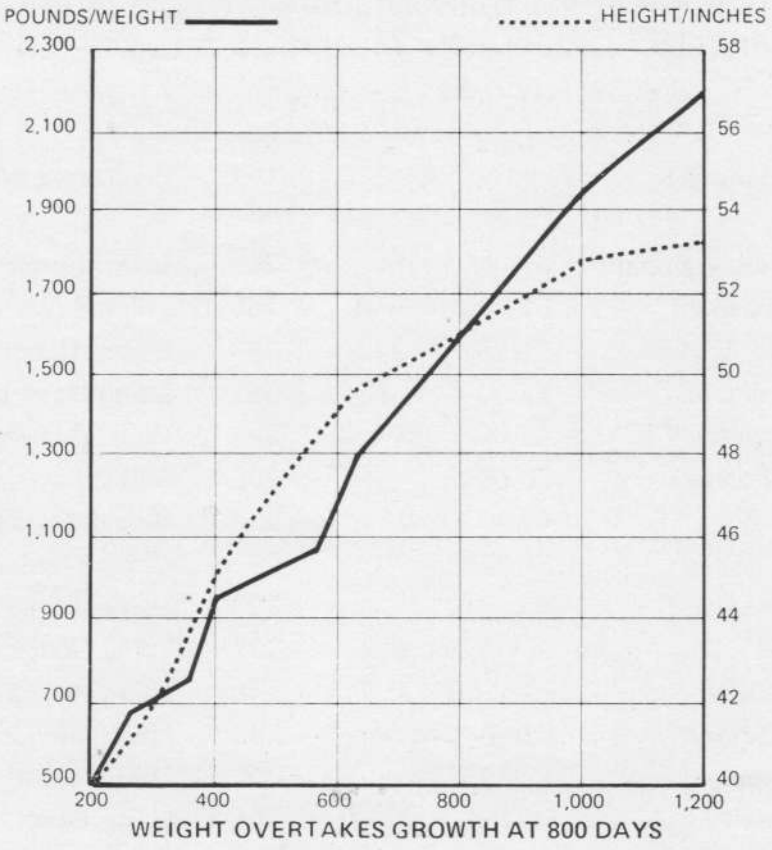
Perhaps at this stage I had better outline the testing and selection we had evolved for our bulls to ensure that we were not losing size in the herd and were continuing to breed animals with length, growth potential and economic feed conversion. We started this programme in 1968.

Nowadays we pick out from our breeding herds the top 20 per cent of young bulls at weaning. These go down to East Coast farms where they are weighed, and measured for height at the withers, two measurements which are recorded every six weeks till the animals go back to the Island of Luing. At any stage up to 2 years old, animals may be rejected for obvious physical defects, and poor conformation. Weights and stature measurements are only used as minimum standards.

After being allowed to settle down on the stubbles, the young bulls are reared much as the commercial steers on ad lib hay and 3 lbs. barley and protein until December. They are then housed during the day, and out at night receiving ad lib hay and 5 to 6 lb. barley per head. In March/April, comes the reckoning, when the top 50 to 75 per cent are selected, taking growth, potential weight, conformation, and general soundness as a guide.

The best young bulls are used as junior stock bulls. We do not encourage over-fat bulls or heifers, and as a result, we do not put much emphasis on weight. Our cattle have to be in breeding condition the day after the sale.

We started to record height at the withers, or stature, in 1969, although we weight-recorded from 1966. We believe that the stature measurement, taken by a measuring stick with a spirit level from the ground to the top of the shoulder, may be used as a guide by breeders wishing to eliminate undersize cattle in their herds. It is also a pure measurement which cannot be influenced by feeding to put on 'show' condition. It is also a statement of fact which cannot be argued over as can one man's judgement of an animal.



There has been found to be a correlation between wither height and weight. By taking graphs of height and weight gain of over 200 bulls at various ages we found that the point when an animal started to mature was the point at which stature was overtaken by weight gain. If this point could be extended, then one was breeding heavier and bigger cattle without their putting on fat. Standards were worked out as guide-lines to breeders. But it must be remembered that stature was only one of the characteristics required—and it does not necessarily mean that the tallest bull is best.

Measurements

	Average weight	*Minimum height (height at shoulder)*	*Average height (height at shoulder)*
COW	1,232 lbs. (559·3 kgs.)	46 in. (116·8 cms.)	47½ in (120·6 cms.)
BULL - 10 months	Growing Period	40 in. (101·5 cms.)	42 in (106·5 cms.)
- 13 months	Growing Period	44 in. (111·6 cms.)	45½ in. (115·4 cms.)
- 18 months	Growing Period	46½ in. (118·1 cms.)	48 in. (121·8 cms')
- 20 months	1,232 lbs. (558·8 kgs.)	48 in. (121·9 cms.)	49½ in. (125·6 cms.)
- 23 months	1,356 lbs. (670·4 kgs.)	49 in. (124·4 cms.)	50½ in. (128·1 cms.)
- Mature	2,128 lbs. (966·1 kgs.)	52 in. (131·9 cms.)	55 in. (139·5 cms.)

REMEMBER—Stature is only one of the assets required in a Bull

Below are the heights of the bulls which were sold at the Annual Sale in Oban, in January, 1973, between 21 and 25 months old.

Sale Cat. Number	*Name of Bull*	*Height in Inches*
250	Brothersheils Rampant	51
251	Orchil Sebastian	51
252	Edradynate Admiral	51·25
253	Orchil Ferdinand	52
254	Orchil Maximo	52
256	Balmoral Polveir	50·50
257	Cladich Boy	49
258	Glenforsa Prince	51·25
259	Luing Festival	50
260	Luing Flyer	51·50
261	Luing Reporter	52
262	Luing Wanderer	50·50
263	Luing Example	50·50
264	Luing Model	50·75
265	Luing Mustang	51·50
266	Luing Highland Laddie	50·75
267	Edradynate Amber	51·25
268	Luing Osprey	53
269	Luing Eagle	51·25
270	Luing Action	50·25
271	Luing Quail	50·25
272	Luing Exchange	52·75
273	Luing Discovery	50·75
274	Luing Exporter	50
275	Luing Happy Man	50
276	Edradynate Angus	50·25
277	Caddleton Cock Robin	50
278	Caddleton Reiver	49·50
279	Caddleton Cobbler	51
280	Luing Scottish Flight	52
281	Luing Carpenter	50·50
282	Luing Kingfisher	52·50
284	Luing Merlin	53
285	Luing Peregrine	50·50
286	Luing Braw Lad	51·50
287	Luing Hallmark	50·75
288	Luing Conqueror	49·25
289	Luing Scots Thistle	50·25
290	Luing Amber	49·50
291	Luing Gamble	50·50
292	Caddleton Hawke	51
293	Muckairn Duncan	52
294	Monzie Swagman	50·50
295	Luing Pibroch	50
296	Luing Banker	51·50
297	Luing Scottish Soldier	49·50
298	Luing Pretender	50·50
299	Luing Decision	49
300	Luing Bushranger	50·50
301	Luing Peak	51
303	Luing Enterprise	49·50
305	Lochay Trophy	48·25
306	Caddleton Teacher	50·50
307	Lochay Thistle	50
308	Muckairn Donald	52
309	Monzie Milestone	50·25
310	Collierholme Dauntless 2nd	52

The average height of the Bulls sold at the last four Luing Sales shows a steady increase. This has been achieved by eliminating the smaller type at the bottom.

	Number of Bulls Sold	*Average height in Inches*
1970	36	49
1971	45	50·1
1972	39	50·5
1973	57	50·8
1974	65	52·1

A change in the size of our cattle has been practically achieved, we believe, by using this minimum stature measurement, not only in steers, but in the cow herd.

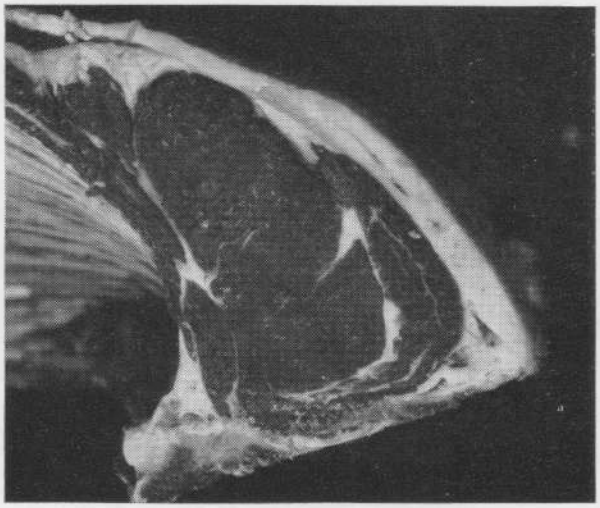
Progeny Performance

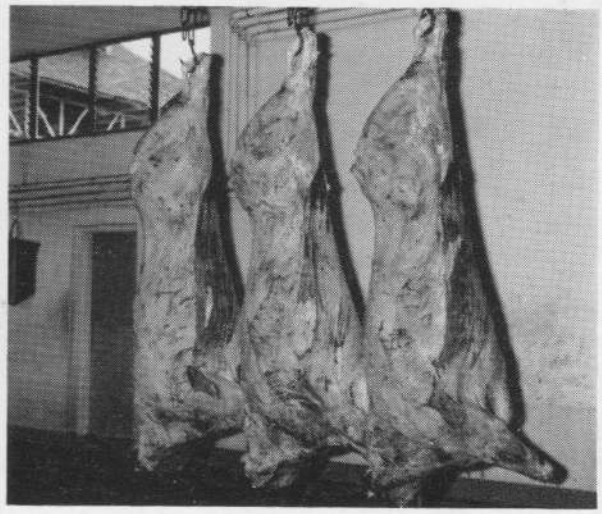
Average weaning weight of male calves at an average age of 200 days.

Year	*Number recorded*	*Weight*
1969	241	484 lbs.
1970	245	501 lbs.
1971	248	489 lbs.
1972	295	511 lbs.
1973	287	509 lbs.

Steers will finish off grass at 1,008 lbs. at 20 months, or if grain fed, at 16 months, putting on on 2·3 lbs. per day. 1972/73—44 bull calves average 940 lbs. at 400 days, running outside on a growing ration of hay and 6 cwt. grain and protein.

Apart from our Annual Bull and Heifer Sale in January of each year at Oban, there are many thousands of steer and heifer calves and yearlings sold by breeders. These are, in general, measuring up very satisfactorily. Some feeders of the steer calves, to begin with, fed them too heavily with grain and inhibited their growth by fattening them too quickly. Our breed is mainly a roughage converter, and, as I have explained, is thus cheaper to keep because it does not require large quantities of grain.





Rib eye and sides of beef from our production line.

The quality of the carcase is generally classed as 'top commercial'. It is really amazing how the Luing can imprint his likeness on his offspring. Luing fat steers are now sold in hundreds without the butchers seeing them—they know, exactly, what type of carcase they are getting.

On the heifer side, breeders are finding the benefit of having a self-contained herd—one is able to keep one's own replacements—the beasts know the ground and they are acclimatised—one's herd keeps free of infections and one knows their breeding. We set out to emulate that grand old 'Lady of the Hills', the Blackfaced ewe, and I think she would agree that we have gone some way towards achieving it.

Range Cow Production

The main purpose of the Luing Breed is to produce a range or hill cow suitable for a terminal cross of your choice. The breeding and mothering qualities of this dam are therefore of paramount importance. Below we give some interesting figures collected over the years which demonstrate these qualities inherent in the breed.

Breeding Data collected from Herds of Pedigree Luing Cattle run under range conditions on rough, mountainous country with a minimum of attention.

Winter feed of the above is based on 1,500 lbs. hay or 2½ tons of silage and a total of 5½ cwt. of grain and minerals.

Breeding year	*No. of cows put to bull*	*No. of cows not in calf*	*Calving assistance* Major – Minor	*% of calves weaned to cows put to bull previous year*
1969/70	620	28 (4·5%)	not recorded	91·6%
1970/71	615	32 (5·2%)	4 – 5 (total 1·5%)	89·9%
1971/72	818	39 (4·8%)	4 – 9 (total 1·6%)	90·2%
1972/73	832	32 (3·8%)	6 – 10 (total) 1·9%	91·3%

27 Luing/Angus heifers calving down at 2½ years old to a Charolais bull—27 live calves—assistance nil. NO CAESARIANS EVER KNOWN WITHIN THE BREED.

Calving pattern of cows, 1972/73—2 year old bulls and older run with 45-50 cows on hill ground: 1 year old bulls with 30 cows.

at end of 3 weeks 56% cows had calved
at end of 6 weeks 84% cows had calved
at end of 9 weeks 95% had calved.

One of the most exciting aspects of the last few years, has been the success that commercial breeders have achieved by using Luing bulls on black, blue grey, cross Hereford, or indeed any cross of beef cow. The Luing seems to imprint his likeness on the calves in an amazing way and he can give the breeder herd replacements for the cow herd. We have now had many repeat orders from such herds.

We look upon the Luing Breed as being 60 per cent biased towards the production of a female and 40 per cent towards the male. It is a breed in which the female can be bred pure, or crossed with any breed one prefers, depending on the type of land one has.

It has been found that the Luing/Friesian cow can make a very good suckler cow for the better land. The Luing gives the cow a better coat for outwintering, along with docility and a good type of udder for a suckler cow. In the beef production world there is a great need for such a cow on which to use some of the continental exotics as a terminal cross.

With this in mind, we approached South Western Farmers one of Britain's largest farmers' co-operatives in 1972, with a view to getting 1,000 Friesian cows inseminated with Luing semen in Somerset. Mr. Hamish Anderson, the Livestock Manager, arranged to have the calves reared to 12 weeks or 220 lbs., and they are then brought North. The report on the ease of calvings and liveability of the calves is excellent and a good future is seen for this cross.

One of the Luing bulls used for A.I.—Luing Highwayman who has a stature measurement of 56½".

Chapter 6

Establishment of the breed

With the formation of the Luing Cattle Society Ltd. in 1966, we were able to approach the formation of our future policy with a fresh look, completely free of tradition. We had to make sure that people did not just come into the breed to join the bandwagon, and lower the quality of our cattle.

Very simply, we gradually evolved some rules to keep control of quality:

(1) All cattle sold at Society Sales must pass an inspection panel.

(2) No bull to be sold under 20 months of age (this lets people see how he is going to turn out).

(3) No competitive showing to take place.

(4) Under the new bull licensing regulations, before a bull is sold as a Luing bull, he must be passed by a Society inspector as well as by the vet.

If a breeder is not prepared to abide by our rules, the Society will no longer accept his entries.

Since the inception of the Luing Cattle Society Ltd., we have had a grading-up appendix. Females of the Shorthorn/Highland cross, if passed by the Society inspector, can be entered in an appendix, and after two generations, be passed into the Herd Book.

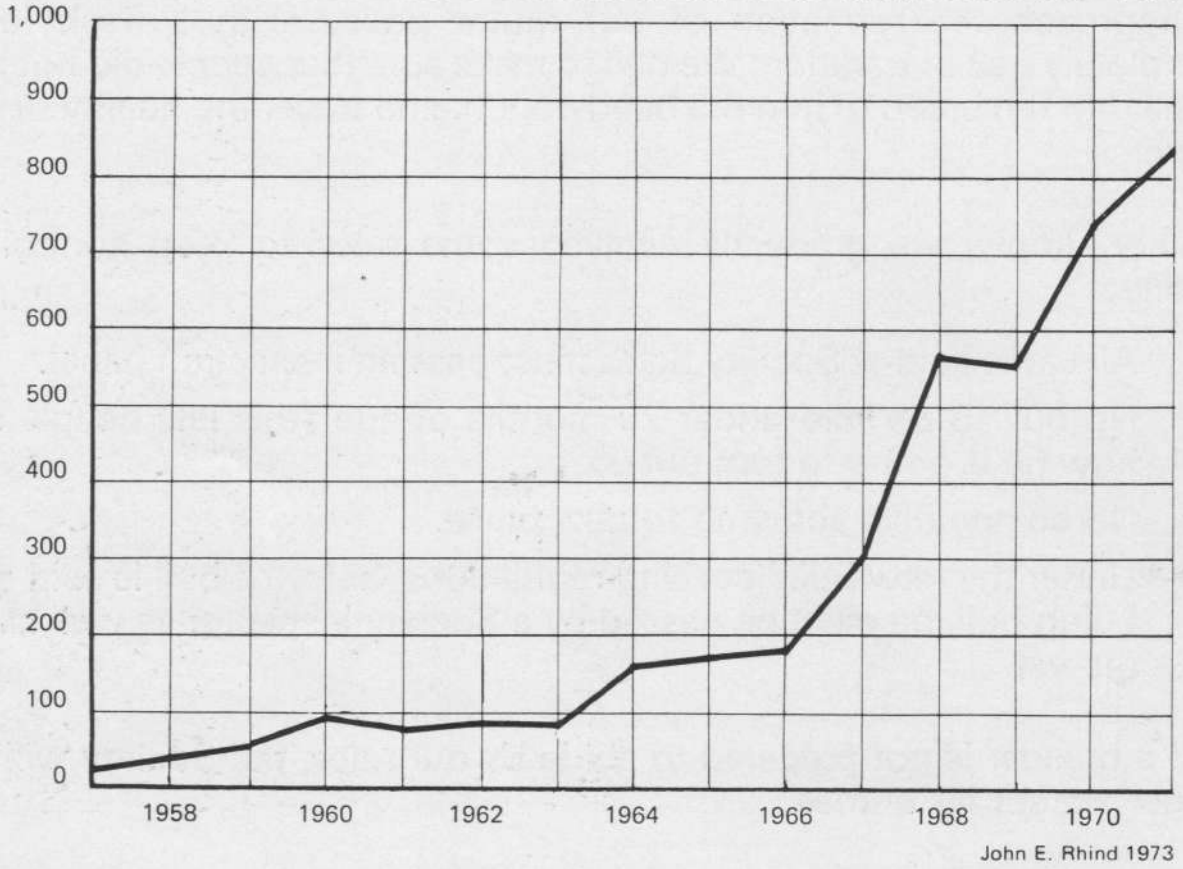
The number of entries in 1972 and 1973 are as follows:

	1972	*1973*
Bulls entered to date:	144	116
Pedigree Heifer calves:	974	1,313
Appendix A:	481	383
Appendix B:	210	36
Members:	155	198

The first Luing sale, in 1966, saw the start of new herds. These herds were wither from purchases of females made at the sale, or from using a Luing bull on grading up females which had been inspected and put into Appendix 'B' of the Herd Book.

From that year onwards, expansion of numbers of Luing herds was very fast indeed, rising to 104 in 1972.

NUMBER OF PEDIGREE FEMALES ENTERED IN THE LUING HERDBOOK 1957–1971



In the Society, although we do not allow competitive showing, we encourage demonstrations. In the last seven years, we have had many such demonstrations:

The Royal Show (40 cattle and carcases).

The Bath and West Show (25 cattle).

12 local shows

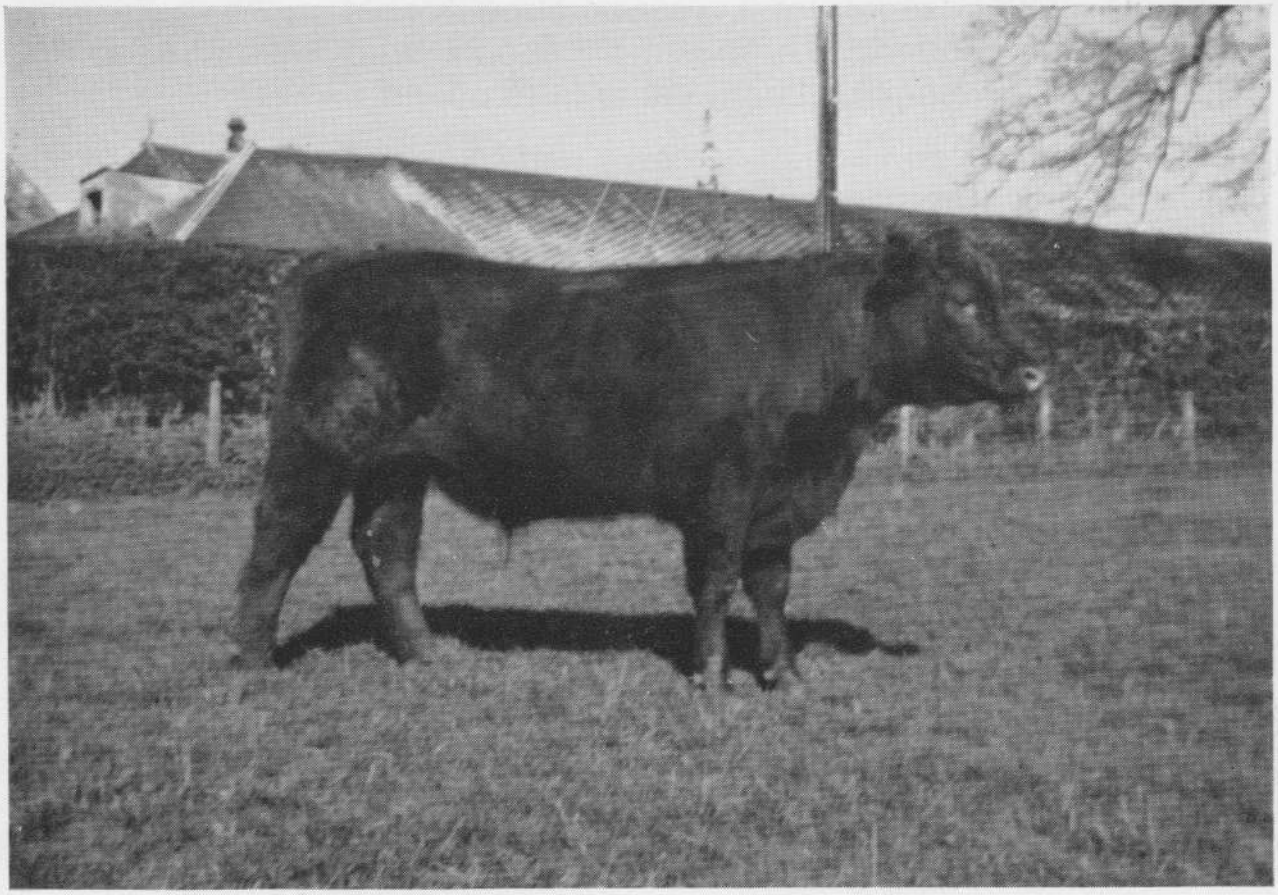
25 farm walks throughout Scotland.

2 carcase demonstrations.

Calgary, Alberta, Canada in 1974, Bull demonstration.

The BBC has been most active with us and has shown two films on the breed and in the 'Look Stranger' programme. We appreciate their help.

Our A.I. programme has been fairly extensive. In the last few years we have collected over 14,000 straws. Canada, New Zealand and Brazil have taken consignments, and Friesian breeders in the U.K. are continually asking for increasing quantities to put across heifers.



Outwintered Luing steer at 21 months

Interest generally from overseas is now coming forward, and regular exports are made to Canada, where there are now four herds, and there are two herds in New Zealand. It takes time and money to develop overseas demand and members of the Cadzow family have travelled many countries in the last two years and perhaps the benefit will soon be coming forward. Meanwhile, enquiries have come in from the Argentine, Chile and Patagonia.

There would appear to be a general awakening of the possibilities of breeding more cattle throughout the world in areas and types of country to which our breed is suited as a result of the increasing world demand for beef.

New Zealand has shown considerable interest, and the South Island would be ideally suited to our Luing. We have, at last, persuaded the Argentine government to allow our breed into the country and have sold 2 bulls and 10 heifers to Patagonia. This, we feel, could be a big market. Columbia has also shown interest, for her high, mountainous country.

We now have representatives operating for us in New Zealand, Argentina and Canada. These are all people who have studied and acquired a knowledge of Luing cattle in Scotland.

To deal with exports of Luing cattle and semen, we formed an export company under the name of Cadzow Cattle Exports Limited.

To enable the Society to advertise its wares by way of demonstrations, and for the collection of semen, the Highlands and Islands Development Board have, over the past few years, given us financial aid. This has been greatly appreciated and, without their help, we would not have progressed this far.

Chapter 7

Conclusion and some thoughts for the future

Development and interest in the Luing has far outstripped our wildest dreams of 1966, and despite the fact that we appeared on the scene at the same time as a number of continental breeds, we have a different objective in view. They are a terminal cross and we are basically a producer of range cows upon which one could use a terminal cross—range cows with good maternal instincts, ability to look after themselves, with very few calving problems, and giving calves which have the will to live. Every steer has to have a 'mum' and the economics of keeping that mother cow and her availability is just as important to beef production as all the pounds per day weight gains that the terminal bull can give.

We are confident that we can produce that cow and this is one of our objectives. We can also produce that cow in other forms than the pure cow. The Luing bull crossed with other breeds can give a very good commercial female. We have just heard of 27 Luing cross heifers which were put in calf to a Charolais, and no assistance was required when calving, at $2\frac{1}{2}$ years old. Also the Luing bull used with Friesians is giving an extremely good cow for suckler calf production on the better land.

With this ability to breed a good suckler cow, we think that our breed is already benefiting breeders in the Highlands by creating an unprecedented demand for these females. The west and north should be a nursery for producing heifers for the suckler cow herds in the south where the terminal cross is used.

One must ponder a minute and try to assess the place of the Luing in the general beef production set-up in Britain. Just now, (1973) we have beef shortages the world over—other countries are willing to outbid us for supplies—we have still a vast potential in this small country of ours, in the hills and uplands. Our breed will supply an economic cow for these areas. And our steer, capable of finishing off grass, will command a place in economical beef production as cereal prices rise.

The biggest scarcity in beef production lies not in the terminal bulls, but in finding suitable mates to give these bulls. We can do it, whether with a pure cow or a cross-bred Luing. This is the place our breed has booked on the assembly line, and they will be there ready to do their job efficiently.

This youngest of British beef breeds has had a wonderful start, and, as long as those breeders destined to direct the affairs of the breed, are also feeders of steers, then so long will the principles of the Society be in safe hands:

"to promote, maintain and advance the Luing breed of cattle, so that it may always serve a useful purpose as a breed."

No rugby match was ever won without teamwork, and what a team we have. The 'forwards' are our men on Luing and what a pack they are—it is their breed, not ours; the 'scrum-half' is the Breed Secretary, unstinting in her interest and determination to pass the message back to the 'three-quarters'—the breeders who have, one-and-all, given us tremendous encouragement and backing, and after a hard match, we have, one-and-all, scored a try and won the match with this most coveted award, the Massey-Ferguson National Award for Services to United Kingdom Agriculture.

The Massey-Ferguson National Award for Services to United Kingdom Agriculture

The Massey-Ferguson National Award for Services to United Kingdom Agriculture is an annual award designed to encourage and reward outstanding contributions of United Kingdom farmers and others to the advancement of agriculture in the United Kingdom.

It consist of a monetary prize of £1,000 and a trophy which is held by the winner until the next award is made. Winners also receive a medallion as a permanent keepsake.

The award is for farmers, farm managers and those engaged in the supporting services of agriculture, in person. Organisations as such are ineligible, as are people whose contributions to agriculture arise from whole time commercial employment.

Selection of the winners is in the hands of an award committee of distinguished agriculturists sitting under the chairmanship of the Marquess of Abergavenny, and representative of a wide range of agricultural organisations, interests and activities.

The committee has powers to withhold the award if it considers that no sufficiently meritorious achievement has come to its notice during the period under review.

Initiative in making the selection lies exclusively with the committee and applications are not entertained.

Activities eligible for consideration as contributions to the advancement of United Kingdom agriculture are envisaged as having a wide interpretation. They can embrace developments in animal or crop husbandry or the design of buildings or machinery, the development of new systems of farm management or administration, or matters related to the general welfare of the farming community.

The rules require that, in the opinion of the committee, the winner shall have made a proven, practical, and outstanding contribution to United Kingdom agriculture.


THE MASSEY-FERGUSON NATIONAL
AWARD FOR