

IRISH CHAROLAIS NEWSLETTER

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Irish Charolais Cattle Society
Irish Farm Centre·Bluebell·Dublin 12·Ireland

Editorial

IN recent months people are asking if the sparkle has gone out of the Charolais cattle, or as they are sometimes called the Silver cattle? I feel the sparkle is still there, all it needs is the enthusiasm that was associated with the breed in its early years.

One's enthusiasm can be put into operation in many ways. If you feel you have something to contribute in writing—your articles will be greatly appreciated. Housewives who perhaps spend long hours at their daily chores and leave the running of the Charolais cattle to their menfolk might now like to express their views through the *Newsletter*.

The young breeder of tomorrow might also like to contribute, no doubt some of their ideas will be of tremendous help in the years ahead.

Since we have now become an established breed in this country let us not for one moment become too complacent. Small problems occurred in the past, some of those problems are still with us and no doubt we will have some to content with in the future but with enthusiasm and co-operation all of these can be overcome.

My appeal for 1975 is let us all renew our enthusiasm, and hope that the growth rate of 600 per cent achieved over the first ten years will be surpassed during the next ten years.

On the question of promotion we would appeal to breeders to ensure your animals are well presented for all shows and sales. The impression we make on prospective buyers will be lasting, always remember a satisfied customer is the customer who returns to buy a second time.

A MESSAGE TO BREEDERS

THE prediction that the best market for pure-bred Charolais would eventually be the national market has come true. To take advantage of this market is the duty of every Charolais breeder to promote the breed by stating the facts about the Charolais pure-bred bull being the greatest sire of beef animals in the world.

During the last two years, the Charolais-cross bred animals have realized top prices in all public sales throughout the country, beating other animals by as much as £3 per cwt. Also at every show where Charolais cattle have been shown, the Champion was a Charolais-cross bred bullock.

There will always be a market for good Charolais-cross bull calves of a week old. They are worth between £30 to £35 per cwt. at that stage, making as much as £15 per cwt. more than calves of any other breed. The same applies to weanlings from 4 cwt.

upwards, providing always they are by a pure-bred Charolais bull, they will make £3 per cwt. more than any other breed. This also applies to finished bulls and bullocks.

If the country had 60 per cent Charolais-cross bred animals by pure-bred Charolais bulls there would be no intervention, and the Government would save millions of pounds, as no subsidy would be necessary as is done at present with intervention meat, which is eventually sold at less than 50 per cent of the cost price.

Let us, therefore, do our bit to promote the Charolais breed, let us talk to our friends and put them wise as to what they are missing by not breeding and producing animals which will give a better return in monetary terms.

O. VANLANDEGHEM
President

Irish Charolais Cattle Society

Spring Show Reception

THE annual Spring Show reception of our Society will be held on Tuesday, 6th May 1975, at 7 p.m., in the Burlington Hotel.

We feel this is a tremendous opportunity to renew old acquaintances and indeed to make new ones. In addition to the eighty-four Pedigree Members, there are now one hundred and ninety-four Supplementary Members plus eight Associate Members.

Tickets can be had from the Society at £3 each.

As tickets will be limited I strongly advise you to make your applications in good time.

We look forward to meeting you all once again.

Charolais X wins supreme championship at Smithfield

THE Supreme Championship at Smithfield Show went to a 20 months old Charolais X Angus steer. This steer according to Mr. Tom Brewis, the Championship Judge, "corroborated the correct degree of finish with the ideal weight and conformation".

This animal weighed in at 1103 lbs giving a liveweight gain of 1.77 lbs/day and realised a price of £7,800 at auction.

It is fair to say that all the Champions at Smithfield Show had Charolais blood, with the other part mainly Angus.

The Ministown Charolais Herd

by MRS. E. GARDNER Ministown, Laytown, Co. Meath

First Private Importation from France

IN 1964 the Department of Agriculture brought in the first Charolais cattle from France. Five years earlier, my late husband Major Laurie Gardner, accompanied by Mr. P. O'Keeffe and Mr. Frank Quinn went to the native country of these big, growthy, white meat type cattle and were very impressed by the quality of this breed. They submitted a memorandum to the Department of Agriculture. This pointed out the value of the breed to Irish beef production and suggested an importation based on quarantine on an off-shore island.

In 1965, the Department decided to allow a private importation. Those licenced to import decided to operate initially as a single herd and a partnership was set up under the name of Hibernian Charolais Herd. The five partners were P. McGrath, Raymond Guest, John Mooney, Alan Lillingston and ourselves. We purchased 38 heifer calves from the best herds in France. All the foundation stock was carefully selected for confirmation and performance, correct breed type and history of easy calving. When the animals came out of Spike Island, the herd was kept on one farm at Mr. Lillingston's Mount Coote Stud in Limerick. It was felt that a better breeding policy could be carried out and more accurate comparisons could be made, operating as a herd unit. At the time this was the biggest Charolais herd in these islands and visitors and breeders from abroad were plentiful.

In 1966 the members of the partnership, together with the Department who also owned a herd, formed the Irish Charolais Cattle Society and the first herd book was produced.

The first calves arrived in the autumn of 1967 and 10 of them were exported to the U.S.A. In 1969 history was made when the first Charolais bull was sold by public auction at Maynooth Mart, and was bought by Mr. Joe McGrath for 1,100 guineas.

It was the intention of all the partners that sufficient heifers would be retained to enable each partner to have a worthwhile herd of his own after a few years. In 1971 this stage was reached and the animals divided, using a small Irish Hospital Sweepstake drum to draw the lots.

On my farm at Ministown, Laytown, Co. Meath, there are now 16 breeding females plus young stock, and I am lucky enough to have three of the original imports left. My best cow is still **Action** whom we purchased from M. Paul Pacaud ten years ago. Her full sister **Epitete** has won several championships in France and breeds outstanding calves for M. Pacaud. **Action** is just about to have her eighth calf, and I have two of her daughters, two grand-daughters and one great-grand-daughter in the herd. Three of

her progeny are in the U.S.A. and one bull in England. **Armada**, bred by M. Lamborot, is also having her eighth calf, and **Abundance**, also over ten years old, has the same sire as the great **Silvain**. **Aubepine**, unfortunately now dead, was the dam of Mrs. Gubbin's herd bull **Hibernian Eclipse** who sired the champion bull at Balmoral this year.

Another good cow bred at Mount Coote is **Chablis**. Her half sister **Dawn**, which we exported to New Zealand, is believed to be one of the best foundation cows of Mr. Bunker Hunt's herd there.

To bring new blood into the herd we bought three good heifers bred by the Ministry of Agriculture of Northern Ireland in 1972, also the present herd sire **Loughgall Handsome**, a very good son of the great **Archiduc**. A.I. from various Irish and English bulls is also used. A young heifer has been sold to New Zealand last year and will be on her way soon. The Ministown Charolais herd has been represented in every Charolais Pedigree Sale and Show in Ireland.



This photo of Mrs. Gardner was taken at the World Charolais Convention in Dublin. The five months old bull, Ministown Iago, realised a price of £3,100 at the Special Sale and was purchased by Mr. Shurick of the U.S.A.

Council Members for the Year 1975

President

Mr. O. H. Vanlandeghem, Skidoo Stud, Ballyboughal, Co. Dublin.

Vice-President

Mr. J. J. Kelly, The Twenties, Drogheda.

Treasurer

Mr. S. Fitzgerald, Farmleigh, Castleknock, Co. Dublin.

Mr. J. McGrath, Curragh Grange, Curragh, Co. Kildare.

Mr. P. Doyle, Glencarrig, Oldbawn, Tallaght, Co. Dublin.

Major E. A. Boylan, Hilltown, Drogheda.

Mr. J. Bellingham, Glencara, Rathconrath, Co. Westmeath.

Mr. N. Hayes, Kells Ingram Farm, Townley Hall, Drogheda.

Mrs. E. Gardner, Minnistown, Laytown, Co. Meath.

Mr. J. Mulhall, Liffey Lodge, Gingers-town, Naas, Co. Kildare.

Mr. F. Harte, Legnakelly, Clones, Co. Monaghan.

Mr. D. O'Driscoll, Chief Livestock Inspector, Department of Agriculture and Fisheries.

Secretary

Mr. Walter Feely.

Research

AS Ireland becomes more integrated into Europe, greater diversification of beef markets will be needed. The Charolais breed of cattle has all the qualities to satisfy the continental market, therefore, we must be in a position to supply this market when the time comes.

One question is often asked: Does the Charolais have a calving problem? From official records made available by the Milk Marketing Board in England the percentage of difficult calvings in "A" series bulls varied between 0 and 10.4 per cent. This is quite true of most continental breeds and accordingly a certain amount of research is needed to weed out the bulls that have a proven record of difficult calving.

A very good opportunity exists at the moment to do a limited amount of research on this problem. Large numbers of Pedigree and Graded cattle are born each year to a variety of different bulls. Should each breeder complete the reverse side of a Grade card he would be contributing enormously to the existing amount of information already available on calving. Should all cards be accurately compiled then within a very short space of time information, valuable to you and your Society would be made available.

With this type of information available we would then be in a position to recommend the Charolais bull best suited to the particular need of individuals. This no doubt would increase the demand for the Charolais bull and with a greater supply available a better screening of bulls can now be made before recommending them to a breeder.

It is also the intention of this Society, in conjunction with the Department of Agriculture and Fisheries and A.I. stations, to carry out a limited survey in dairy herds using Charolais bulls on Friesian cows. The survey would entail recording gestation period of cow, weight of calf at birth, ease of calving, etc. If some way can be found to rear those calves in groups to slaughter where an appraisal can then be made on the carcass, this would indeed be a great step forward.

Vichy 1974

One of the business highlights of the 11th World Charolais Federation Meeting in Vichy, France, was the establishment of a working technical committee whose responsibility will be to undertake and co-ordinate research in the field of genetic defects. First report on the activities of this committee will be given at the 1975 international session in Calgary, Canada. A limited amount of research has already been carried out, at local level, in different countries.

Comparison of Bulls and Steers Using Charolais and Simmental Crosses

by DR. F. J. HARTE, An Foras Taluntais, Grange, Dunsany, Co. Meath.

IN one experiment at Grange, Charolais cross-bred bulls and steers were compared with Simmental cross-bred bulls and steers. The calves were born in the spring, suckled at 4 per cow and slaughtered at 2 years of age. All the calves were purchased commercially and it was not possible to determine the breed of dam in all cases. The average weight of the Charolais cross calves at 1 year old was 318 kg, and the Simmentals was 293 kg. The bulls were about 7 kg heavier than steers at one year old. The liveweights and carcass weights of the different breed crosses at slaughter are given in the following table:

TABLE 1: Liveweights and carcass weights (kg) of the different breed crosses at slaughter at 2 years of age (Experiment 1).

	Charolais Crosses		Simmental Crosses	
	Bulls	Steers	Bulls	Steers
Liveweights	572	522	558	515
Carcass weights	327	294	308	285

Detailed carcass analyses is being carried out at present to determine the yield of lean meat, fat and bone.

In another, earlier, experiment, pure Friesian were compared with Charolais crosses. The animals were slaughtered at 2 years of age and the results are given in Table 2:

TABLE 2: Liveweights and carcass weights (kg) of the different breed crosses at slaughter (Experiment 2).

	Charolais Crosses		Friesian	
	Bulls	Steers	Bulls	Steers
Liveweights	605	546	551	551
Carcass weights	340	296	299	289

Carcass analyses of the Charolais cross animals showed that the bulls had considerably leaner carcasses than the steers (Table 3). Similar data was obtained with Friesians in earlier experiments.

TABLE 3: % lean, fat and bone in Charolais cross bull and steer carcasses (Experiment 2).

	% Lean	% Fat	% Bone
Bulls	76.7	7.7	15.6
Steers	68.7	14.4	16.8

The difference between the Friesian bulls and steers was somewhat lower than was recorded in previous experiments but the difference between Charolais cross bulls and steers, in particular, is very worthwhile.

Footnote—It can be clearly seen from these experiments that bulls grow faster than steers, produce more lean meat and are better converters of food. It will also be noted that both Charolais bulls and steers gave a better performance than bulls and steers from other breeds and when this is reflected in monetary terms, the idea of using a Charolais bull becomes very attractive.—EDITOR.

Export Certificates

RULE 10 of the Irish Charolais Herd Book states "All animals sold for export require an Export Certificate duly certified by the Society." Such certificates will be supplied only to members of the Society and in respect of such animals as are deemed satisfactory by the Society. The fees payable for export certificates shall be as the Council of the Society may from time to time, decide. I would like to draw your attention to my circular of 20th August, 1974. The

export certificate fee for animals entering the jurisdiction of the B.C.C.S. Herd Book has been reduced to £15.

Licensing of cross-bred bulls

AS already announced by the Department of Agriculture licencing of cross-bred bulls will be confined to Grade B ($\frac{3}{4}$ bred) or better in 1976. All bulls intended for licencing should be registered with the Society **within 30 days of birth**. Fee for registration £5 per animal.

NEWS ITEMS

C.B.F. Carcase Exhibition

IT was with a certain amount of regret exhibitors of Charolais X steers received the news that this year there would be no competition between the various breeds of cattle. A Charolais X steer won the overall Championship in 1974 and exhibitors were eagerly looking forward to 1975. The Board of C.B.F. decided to cancel the competition, as we have known it over the years, and substitute it with an exhibition.

This year two animals will be featured from each breed, one animal to be slaughtered on the Monday prior to the Show. The live animal, together with a side of the dead animal will be on display during the Show. This will mean that for the first time carcasses and live cattle are being exhibited together, and it will be then up to each individual to compare the animals, and their relevance to the various markets.

From this Society it is hoped to feature two 12 cwt. animals, one from a Shorthorn cow and one from a Friesian cow. The animals will be sired by a full French Pedigree Charolais bull and will have no more than four permanent teeth.

Exports to Canada

THE following report was very kindly sent in by Mr. B. Monaghan of Staffordstown House, Navan, Co. Meath.

"Two bulls, both sons of **Shamrock Ambassadeur, Meath Hijacker and Meath Irvin**, have been purchased by Mr. B. Patterson, Leross, Sask., Canada. This is the first export of Charolais to Canada from Ireland. Mr. Patterson has a herd of Canadian domestic Charolais and he thinks Ambassadeur sons are going to improve things for him. He first visited our herd early last spring and hopes to return again to buy some Irish full French heifers. He thinks so highly of Hijacker that he has put him into the Canadian A.I. and he is now standing beside a Canadian Charolais bull Cadet 18C owned by Mr. John Rudiger. He is having Hijacker C—C (Conception to Consumer) tested—the main objective being to establish

- (1) Ease of calving.
- (2) Pre-weaning gain.
- (3) Post-weaning gain.
- (4) Carcase evaluation.

"The C—C test is usually run on a minimum of 40 cows. All this information will be available later and it will be of interest to see how a son of Ambassadeur compares with all the other Charolais bulls on the Canadian tests.

The younger bull, Irvin, exported before he was a year old, has already a full brother, Hyperion, in Kentucky with Dr. French.

"Hijacker has a full sister, Gazelle, in Georgia, U.S., and another full sister, Indira, was sold at New Zealand this year."

Harvest Sale of Grade Cattle

A sale of Grade B cattle (male and female) will be held at Maynooth Mart, on Friday, 10th October, 1975. This sale will be held in conjunction with the Pedigree sale. However, should total entries exceed 120 then two separate sales will be held. The Pedigree sale will then be held on the 10th of October and the Grade sale on the 31st of October. All animals entered for the sale will be subject to an inspection prior to the sale. Animals found unsuitable (i.e. not of sufficient standing and poorly presented) will not be allowed into the sale.

Charolais Do Well at N.I. Sales

THERE was a good sale for both bulls and heifers at the Third Annual North of Ireland Charolais Club Show and Sale held on the 15th and 16th January, 1975.

This sale included a draft sale at Loughgall for the Northern Ireland Ministry of Agriculture.

Top price female, **Loughgall Jennifer**, born on 19th January, 1974, by Loughgall Archiduc, was sold for £4,800 to a Derry breeder.

Average price for Loughgall cattle: 11 full French heifers £3,193; 4 full French bulls £892. Nine of the eleven heifers sold were by Loughgall Archiduc.

Crossbred bulls averaged £661, grade registered cows £400 and grade registered heifers £469.

Champ at Balmoral Bred in Kildare

PRICES at Balmoral were slightly easier with 6 full French heifers averaging £2,960. Full French bulls averaged £967 and the Champion bull realized a price of £1,380. The Champion, **Mourne Ischys**, was bred by Mrs. Gubbins, Grey Abbey, Naas, Co. Kildare, and exhibited by Mr. L. Lucy, Beechmount, Enniskillen.

There were no half-bred bulls on offer but threequarter-bred bulls ranged in price from £300 to £760 and one outstanding seven-eighths-bred

sold for £990. One notified Grade G heifer sold for £1,740, but it must be emphasised that this was an outstanding type of animal.

It is the opinion of the Secretary that the standard of cattle was good and presentation excellent.

The Ultimate in Beef

I quote this extract, written by Mr. John Shirley, in the *Farmers' Journal* on 22nd March, 1975. In it he outlined beef prices and the type of animal presently being presented at the factories.

"These cattle were the ultimate in beef animals. Everybody should have some of them. Eight Charolais bullocks averaging 14 cwt. They had excellent finish, with the flesh shaking on them. The bullocks had been separately stalled on hay and pulp nuts in the old-fashioned way. They looked quite full and had travelled 20 miles to the factory. They killed out a good 63.43 lbs. per cwt. or 56.66 per cent. At 39p per lb. they made £24.73 per cwt. or a fine £346 per animal."

Extraordinary General Meeting

AN Extraordinary General Meeting of the Irish Charolais Cattle Society Ltd., will be held on Thursday, 8th May, 1975, in the Committee Room of the R.D.S., Ballsbridge, Dublin. The meeting is scheduled to commence at 10.30 a.m. sharp. We do hope you will be able to attend.

Breed's Ten Years of Progress

IN the December issue of the *Australian Charolais Newsletter* a history was given of the progress made by the Irish Charolais Cattle Society. This article was written by Mr. Vince Morris, a freelance journalist from Australia.

He outlined the progress made by the Society from its inception until its present day standing, and dwells at great length on the St. Etchen's herd, owned by Mrs. O'Donagan, Monasterboice, Co. Louth. He also mentions the hospitality shown to him at Monasterboice and refers specifically to Mr. Paddy Maguire and his deep knowledge of Charolais breeding.

As space does not allow me to dwell at length on this article (1400 words plus) suffice it to say that it has been extremely well written and should give a boost to our promotion work in the Southern Hemisphere.

COMMENTS ON A GRADING-UP HERD

by MR. J. J. KELLY The Twenties, Drogheda, Co. Louth

WHEN we decided in early 1973 to lay the foundation of a graded-up Charolais herd, the question was what was the best breed to lay our foundation on. We knew the merits of the Shorthorn breed as a base for crossing other breeds, so we decided to purchase most of our 40 half-bred Charolais females from the Shorthorn base, but we also availed of the opportunity to purchase some very good Half-Friesian heifers. We are pleased to find that our best calves are derived from both bases. We also had a few heifers with an Angus base, while the calves from these heifers show nice quality they are generally lacking in the scope which we have set out to establish in all our grading-up stages.

Having assembled our 40 base females by selection over a wide area, we started mating them to 3 different A.I. bulls, including *Ambassadeur* and two of his sons. Then after two months of careful watching for signs of heat in the heifers, we decided that we were likely to have many barren heifers if we did not run a bull with them. So we purchased another son of *Ambassadeur* to complete the mating programme.

As calving time approached in early 1974, we had much trepidation on how these heifers were going to get over the process of calving. However, the calves started arriving and generally we gave some assistance. Then one day in May we found we had 25 calves and not one calf had been lost in the calving, and at no calving had there been veterinary assistance. But our good record was broken one day in June when we were very busy with silage and hay-making. We had overlooked taking a heifer near the farmyard as she came near calving, and we found her one evening with a breach presentation and apparently in labour too long. The calf was delivered by a little traction, but alas too late. However, we have had a dozen more calves born since then, and still no veterinary assistance, and all calves born alive.

There is one cardinal rule we have established which is, be very slow to apply traction until the cow is getting tired, that is providing the presentation is correct, and, of course, make sure the calf gets colostrum as soon as possible after birth.

Looking to the future and a change from the *Ambassadeur* line, we are using a son of *Figaro* which we purchased at the World Convention Sale, September 1973, when *Figaro* progeny were so

popular. This young bull, jointly owned with the Elm Grove Herd, was later successful at R.D.S. Spring Show, 1974, where he was awarded 1st Prize Junior Class. We now have six calves on the ground by this bull (again no calving problems). He seems to be giving us the

height and length which some of the *Ambassadeur* line lacked.

It is evident that there is going to be a fair amount of culling to be done on the females on the way up the grading ladder. Another observation is the high percentage of calves that have not gained any change in colour, simply following the colour of the dam.

Altogether, while it has been too soon to reap a financial reward, grading-up does seem fascinating, but it is essential to be just as choosy in the sire one uses for this exercise, as it is in the Pedigree Herd.

Supplementary Register Rules

THE following set of rules have been adopted for entry of cattle into the Supplementary Register.

1. No person who is not a member, or a supplementary member, of the Society shall be allowed to register animals in the Society's Supplementary Register.
2. Annual membership fee shall be £5, payable on the 1st January each year.
3. Animals eligible for entry in the Supplementary Register shall be:
 - (a) Animals born to Graded Females sired by a Full French Pedigree Bull.
 - (b) In the case of Grade A, dams must be of good conformation and must be sired by a Full French Pedigree Bull.
4. All animals intended for entry in the Supplementary Register *must be notified within 30 days of birth*, on the appropriate Notification of Birth form. These forms may be obtained from the Society at a fee of £5.
5. Ninety days, from date of birth, shall be allowed to withdraw animals if the breeder so desires.
6. All calves intended for entry in the Supplementary Register must be tattooed within seven days of birth on the left ear.
7. Each herd owner shall be allotted three designated letters and no other person will be entitled to use these letters.
8. **Tattooing**
 - (a) Calves born to beef type cows by Full French Bull=Grade A.
 - (b) Calves born to Grade A Females sired by Full French Bull=Grade B.
 - (c) Calves born to Grade B Females sired by Full French Bull=Grade C.
 - (d) Year letter for 1974—J.
 - (e) Year letter for 1975—L.

Example of how to tattoo a calf born in 1975 to a Grade A cow

Grade A cow tattoo number	ATA	ATA	ATA	
	J1A	J2A	J3A	etc.
Grade B calf tattoo number				ATA
1st calf born into Herd 1975				L1B
				ATA
2nd calf born into Herd 1975				L2B
9. In the case of twin or multiple births this shall be indicated on each Birth Notification form and a separate form shall be submitted for each calf.				
10. Members shall inform the Society of the sale of any of their registered or birth notified cattle. The transfer form on the Grade Certificate or the appropriate transfer certificate for birth notified cattle must be completed and forwarded to the Society for noting, and onwards transmission to the new owner.				
11. As and from the 1st January, 1975, each twenty-fifth calf birth notified to the Society shall be blood-typed before being accepted into the Supplementary Register.				
12. All female animals, at approximately 15 months of age shall be inspected by a representative of the Society to ensure freedom from defects and undesirable characteristics.				
13. Only one inspection to be arranged regionally each year.				
14. All male calves to be presented for licencing at official Licencing Centres. Bulls issued with a licence will be used for such purpose as specified by the Minister for Agriculture and Fisheries.				
15. All birth notifications, when not sired by stud bull, must be accompanied by official A.I. Certificate or Service Certificate.				

On-Farm Recording Scheme and Central Performance Testing of Beef Cattle

by MR. T. TEEHAN
Department of Agriculture & Fisheries

ON-FARM recording and central performance testing are key elements in beef cattle breeding programmes in many countries. They provide an extensive and objective basis for intensive, early and accurate selection of the best breeding animals within a breed.

On-farm recording and central performance testing of the recognised beef breeds is carried out by the Department of Agriculture and Fisheries. A new on-farm recording scheme was initiated this year. Approximately 400 herds are participating in the scheme. Central performance testing has been operating since 1973 at Tully, Co. Kildare. Here there are facilities for the individual testing of 96 bulls each year.

Genetic Principles

Differences between animals are due to two main causes: genetic and/or environmental. Genetic differences between animals are to a great extent passed on to or inherited by their offspring while environmental differences are not. Since the aim of breeders is to select animals which will breed superior offspring they need to identify genetically superior animals. Therefore, sources of environmental effects must be identified and adjustments made. Obvious environmental effects are age, sex, season of birth, age of dam and different management and feeding systems both within and between herds. On-farm records can be adjusted for all these effects except herd differences. Effects of different management systems in different herds are minimised in central performance test results where animals are tested from a relatively early age in a standard test environment. Differences among animals for many economic traits are inherited to a considerable extent.

Traits of economic value for beef cattle are reproductive efficiency, growth rate, feed efficiency and carcass merit. Fertility, a major component of reproductive efficiency, has a low heritability. There is, however, some evidence that low fertility may be inherited to a greater extent than indicated in the literature. Hence, it is desirable to keep detailed calving records on all cows and fertility records on bulls. Other important components of reproductive efficiency are calving ease and calf mortality. These aspects have become increasingly important in this country in recent years with the introduction of the larger Continental breeds. Growth rate and feed efficiency have moderate heritabilities. Carcass merit although less easily defined is highly heritable.

The rate of genetic improvement from

selection for economic traits is dependent on (1) the fraction of observed differences between traits that are due to heredity (heritability or h^2); (2) the difference between selected individuals and the average of the herd or group (selection differential or S.D.); (3) the genetic association between traits upon which selection is based (genetic correlations or r^2); and (4) the average age of parents when the offspring are born (generation interval or G.I.).

If we consider one trait then

(i) expected response to one generation of selection (R_g) is

$$\frac{\text{S.D. males} + \text{S.D. females}}{2} \times h^2 \text{ and}$$

(ii) response per year is

$$\frac{R_g}{\text{G.I.}}$$

Genetic correlations (r^2) come into play when more than one trait is considered.

Let us take a simple example and estimate the expected gains from one weight. Assuming that the average adjusted (for age, sex, etc.) 400 day weight for the herd is 1,000 pounds. Let the selected replacement heifers be 150 pounds above the herd average and the stock bull be 300 pounds above his contemporaries on a central performance test. A reasonable estimate of the heritability of 400 day weight is 0.40. Then the expected 400 day weight of the progeny of these replacements is

Present herd average	+	$\frac{\text{Selectiondifferential ofreplacements (S.D.)(S.D.)(150+300)}}{2}$	+	0.40
= 1,090 pounds				

From the selection made in the example the progeny of the selected animals should weigh 90 pounds more at 400 days than the progeny of unselected animals.

The systematic measurement of differences between animals in traits of economic value and the use of these measurements in selection will facilitate genetic improvement in individual herds and thus in the breed and ultimately the total cattle population.

On-Farm Recording Scheme for Pedigree Beef Cattle

Basically the on-farm recording scheme involves the collection and processing of farm records and the distribution of results. All births in herds participating in the scheme will be notified to the Department within seven days of birth. Information contained in these notifications will include identity of calf, sire and dam, date of birth, birth weight, sex and information on calving experience and mortality. Herds will be recorded three times each year by Department officers using mobile scales or breeders own authenticated weighing scales. Data collected will be processed regularly and results will be summarised.

On-farm records are useful primarily as a basis for comparing cattle handled alike within herds. It is difficult to make valid comparisons between herds or between groups treated differently within herds. This is because large environmental differences due to location, management and nutrition are likely to exist between herds or different management groups within a herd. It is not possible to adjust farm records accurately for these differences. Central performance testing gets over this problem to a great extent. Genetic differences between herds do exist but large environmental differences make the evaluation of such genetic differences extremely difficult.

Farm records adjusted for age, sex of calf and age of dam, enables:

- (a) rapidly growing calves to be identified;
- (b) cows to be compared on their breeding record and the growth of their calves;
- (c) sires to be compared on the growth of their calves and on calving information;
- (d) comparison of herd results with overall breed average.

This information can be used as follows:

- (a) in the selection of cows and replacement heifers by breeders;
- (b) as an aid in selecting the top bull calves for performance testing in the central test station;
- (c) to provide an objective basis for selecting bulls for licensing and premium;
- (d) to provide progeny test information on bulls which are widely used e.g. leased bulls and A.I. bulls and identify sires of superior genetic merit. These bulls should sire many of the next generation of pedigree stock and their sons should be included in a central performance test;

(e) as a useful guide to herd management.

It is accepted that achievement of some of the objectives outlined above will be limited to some extent by the numerically small size of many of the herds participating in the scheme.

Central Performance Testing

Central performance testing is a procedure whereby animals from several herds are brought together at a central location and evaluated for certain economic traits under uniform conditions of feeding and management.

Performance test facilities at Tully are restricted to bulls from the recognised beef breeds. Bulls for performance testing are selected on the basis of weight for age, and conformation. Having passed their veterinary tests, the bulls enter the test station at about 180 days of age. There is an adjustment period of approximately 14 days prior to the test period. The length of the test period is 200 days. During the test period bulls are housed individually. They are fed to appetite three times a day. The diet consists of equal parts of rolled barley and grass cubes supplemented with the required minerals and vitamins. Limited quantities of hay (approximately 2 pounds per day) are fed to help rumination. The bulls are weighed every 28 days. All bulls are given a conformation rating at the end of the test period.

The following test results are provided for each bull:

- (a) 400 day weight;
- (b) an efficiency of feed conversion rating;
- (c) a conformation rating;
- (d) other information on age at start of test, pre-test daily gain, and daily gain on test.

Even under the best possible conditions at a central test station not all pre-test management effects can be eliminated when bulls are a significant period of time on their farm of origin. Bulls whose pre-test management has restricted pre-test gain tend to compensate during the test period and their daily gain and feed conversion figures relative to those of other bulls on test tend to give them credit for having better performance than is actually the case.

Some changes in the test procedure are being implemented this year. It is planned to take bulls into the test station at a younger age (160 days). This will reduce the effects of pre-test environment and thus increase the accuracy of the test. There will also be two separate intakes of bulls, the first intake to take place in May and the second in August. This will allow the intake of a more highly selected group of bulls than is feasible with a single intake. It should be possible to reduce the variations in age and condition of bulls going on test.

Report on the 1974/75 Bull Performance Test at Tully

THE sixteen Charolais bulls on test had an average daily gain of 3.1 lb/day during test and 2.5 lb/day from birth to start of test. The best Charolais bull on test **Cregg Iberius** had a daily live-weight gain of 3.7 lb during test and 3.4 lb/day from birth to start of test. The average 400 day weight of the sixteen Charolais bulls was 1200 lbs with the top bull reaching 1510 lbs. This incidentally was the heaviest of all animals on test. This bull was subsequently sold to Mellifont Abbey for £800.

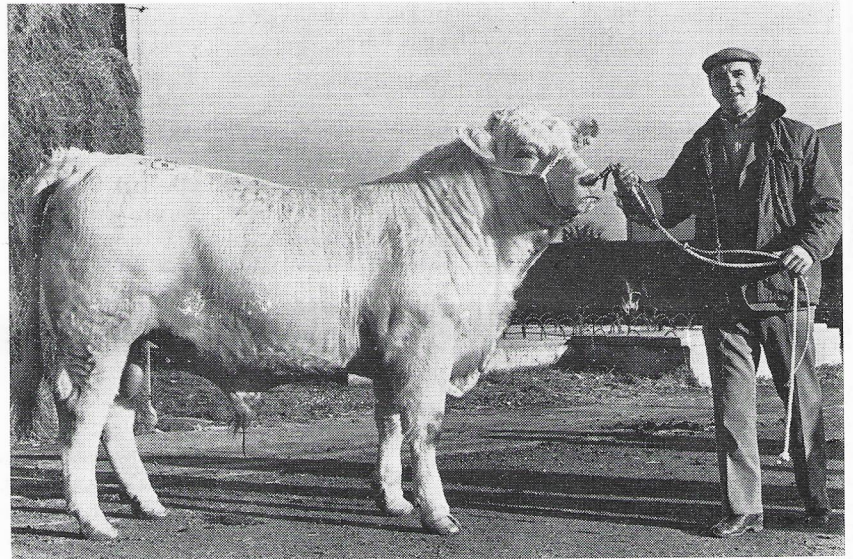
Report on the Sale

Prices paid for bulls were down on the 1974 figures but a greater correlation

now exists between prices and the performance of the individual bull.

The majority of bulls were purchased by Irish breeders with a small percentage going to the North of Ireland and Scotland. Considering the price range of these bulls, and the fact that lean meat is the only acceptable meat to the housewife of Europe, we can now recommend a greater use of the Charolais bull.

A word of praise to the staff and in particular to Mr. Hoyne, Officer in Charge, at Tully, for their complete impartiality towards this test and also for the excellent condition in which bulls were presented for sale. Their efforts are appreciated by all.



Mr. Paddy Clancy with his bull Cregg Iberius at Tully.

INDIVIDUAL RESULTS

Length of Test: 180 Days

Pen No.	Age at Start of Test (days)	Daily Gain (lb) Birth to Start	Daily Gain (lb) During Test	300 Day Weight (lb)	400 Day Weight (lb)	Feed Conversion	Conformation Class	Price Paid
Glencarrig Iane	289	2.8*	2.9	934	1254	below average	A	£525
Glencara Ictinus	276	2.6	3.6	910	1326	below average	B	£375
Glencara Idas	268	2.4	3.9	878	1292	good	A	£400
Meath Iceberg	264	2.9	3.4	990	1380	above average	A	£650
Culdaff Ironside	260	2.7	3.0	902	1226	average	A	£750
Ivernian Imperial	237	2.2	2.9	792	1096	average	C	£350
Ministown Imagele	224	1.8	2.9	762	1044	below average	B	£425
Northbrook Israel	226	1.8	3.3	736	1068	average		
Ivernian Igor	214	2.1	2.8	780	1054	below average	C	£325
Cregg Iberius	206	3.4	3.7	1204	1510	average	A	£800
Ministown Jimmy	202	2.2	2.7	830	1060	below average	B	£400
Skidoo Julien	190	2.7	3.0	930	1238	average	B	£525
Hilltown Jacques	176	2.9	3.0	984	1306	above average	A	£600
Glencarrig Jab-A-Day	168	2.4	2.5	822	1092	above average	A	£550
Skidoo Jouteur	169	1.6	2.7	730	1040	good	C	£400
Glencarrig Jump-A-Day	171	2.7	2.7	908	1206	above average	B	£652

COME TO CALGARY, CANADA,
for the
1975 WORLD CHAROLAIS FEDERATION

—Enjoy the excitement of the famous Calgary Stampede
—See 250 of the continent's best Charolais and the World Show and Sale

PROGRAMME

Wednesday, July 2

Registration
Banff Tour for official delegates
Reception for non delegates in four hotels

Thursday, July 3

Registration
Annual meeting of FIAERBC
Luncheon
Technical meeting
Stampede rodeo events
Heritage Park Tour
Ranch Barbecue

Friday, July 4

9th World Charolais Show
Stampede rodeo events
Dinner
9th World Charolais Purebred Sale

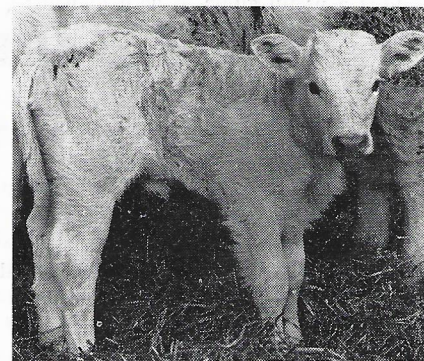
Saturday, July 5

Western breakfast
9th World Charolais Full French Sale
Stampede Chuckwagon Races

Sunday, July 6

Western Breakfast at Prince's Island

Persons interested in travelling to Canada should contact the Secretary (tel. 501166) immediately for details. Hotel reservations must be confirmed before April 30th. It is hoped that a party from Ireland both North and South will leave Dublin on Sunday, June 29th, and arrive back in Dublin on Sunday, 13th July, 1975.



DAUGHTER OF SHAMROCK
(Imp. '65F) AMBASSADEUR

This photo has been kindly sent along by North Western Cattle Breeding Society Ltd. The heifer born on 24th February, 1975, is by Shamrock (Imp. '65F) Ambassadeur and the dam is Doonally (Imp. '70F) Finette. This photo was taken when the calf was two days old.

Spring Sales at Maynooth 1975

A very large entry of cattle were offered for sale at the Spring showing of Pedigree Charolais cattle. Prices for top-class animals was good with the top price of 3,200 gns. for an in-calf heifer **Cregg Idaline** by M. M. Absalon out of Cregg Eglantine. This animal was exhibited by Miss Louise and Mr. Conor Carrigan and purchased by Mr. J. McCaul, Mayfield Farm, Magheralave Road, Lisburn. Top price for a bull, 1,050 gns., was paid by Mr. Pat Doyle, Glencarrig, Oldbawn, Tallaght, Co. Dublin, for **Farmleight Justin**, the property of the Earl of Iveagh. A good heifer from the stud of Mr. P. J. McCarrroll, Carndonagh, Co. Donegal, realised 1,900 gns. This animal should be an asset to the stud of Mr. P. McCullough, Elmgrove, Gormanston, Co. Meath. Six bulls were on offer from the stud of Mr. Monaghan, Staffordstown House, Navan, Co. Meath, and his top bull sold for 860 gns. The purchaser in this case being Mr. V. Bothwell, Foydra, Brookeborough, Co. Fermanagh. Mr. J. Bellingham's Glencara Stud had six animals on offer and here there was a top price of 900 gns. for a heifer **Glencara Juliana**. This animal was purchased by Mr. P. Whiriskey,

Ardrahan, Co. Galway, who also purchased and paid 2,000 gns. for **Shamrock Gloria**. This cow was shown by Mr. F. Harte, Legnakelly, Clones, Co. Monaghan. A full French imported cow owned by Major E. A. and D. F. Boylan sod for 2,300 gns. to Mr. McCullough. This stud had a large selection of stock on offer and prices ranged from 740 gns. to 2,300 gns. Two 1975 heifers on offer, both by Enfield Helas, sold for 660 gns. and 520 gns. respectively. These were two good heifers and perhaps this bull may prove popular with breeders in future years. **Grangebeg Jasmine**, owned by Mr. E. Doyle, Coolgene, Scholarstown Road, Dublin, sold for 950 gns. to Mr. Taylor, Strabane, Co. Tyrone. A good selection of bulls were shown by Mr. F. McInerney, Mrs. O. Donegan, Mrs. E. Gardner, Mr. J. McGrath, and these bulls averaged 350 gns. **Ivernian Irma**, the property of Hibernian Livestock Ltd., Cork, sold for 1,600 gns. to Mr. S. McIlwaine, Enagh Farm, Londonderry. This stud received an average of 425 gns. for their bulls. Mr. D. Gold, Knappagh, Ballybay, Co. Monaghan, received 500 gns. for his bull from Mr. T. Burke, Highland Farm, Farranfore,

IRISH CHAROLAIS
CATTLE SOCIETY LTD.
**FORTHCOMING
PEDIGREE SALES**
ROYAL DUBLIN
SHOWGROUNDS, BALLSBRIDGE
11 a.m.
WEDNESDAY, MAY 7th
(in conjunction with the Spring Show)

MAYNOOTH MART
12 noon
FRIDAY, OCTOBER 10th

GRADE REGISTER SALE
MAYNOOTH MART
OCTOBER 1975 (date to be decided)

Enquiries to
THE SECRETARY
Telephone 501166

Killarney. Two heifers owned by Mr. North, Aughrim, Co. Galway, averaged 1,250 gns. Other animals on offer came from the following breeders, Countess of Dunraven, Mr. McCaffrey and Mr. J. Jennings.

Footnote

It is the wish of this Society that greater care should be taken in presentation, where animals are offered for sale. This is also the expressed wish of your inspectors who are now empowered to pass or reject animals entered for future sales. Rejected animals will not be allowed through the sales ring on day of sale. Your co-operation in this matter will be appreciated.