Breeding Programme of the Irish Charolais Cattle Society Ltd.

(with approval recognised under the EU Animal Breeding legislation by the Department of Agriculture, Food and Marine)

Approved by the Council of the Irish Charolais Cattle Society on the 11th April 2024

The Irish Charolais Cattle Society was established in the form of a co-operative Society in 1965 and the Irish Charolais Herd Book was subsequently set up to maintain a register of imported eligible stock and progeny derived therefrom. This Herd Book is now referred to as the Breeding Book of the Irish Charolais Cattle Society.

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This is the Breeding Programme of the Irish Charolais Cattle Society and shall include:

a) Particulars of the pedigree and performance of purebred Charolais animals, which are eligible to be entered therein.
b) Such other information as the Council of the Society may from time to time decide.

1. Name of Breed

Charolais

2. Breed Characteristics

Purebred Charolais Cattle are generally creamy white through to a light tan colour.

Females: The female should have distinct feminine characteristics. The head should be wide muzzled and alert. The neck should be fine, cleanly cut and neatly set onto the shoulders. The back should be long and level with a good spring of rib. The tail setting should not be dropped and preferably should be slightly raised. The legs should be of good flat bone on good sound feet. In the case of cows, the udder should be of a good capacity with four well-formed teats.

Males: The male must have a distinct masculine appearance and be equipped to fulfil its essential reproductive functions. The muzzle should be broad, clean, uniformly light without pigmentation. The head should be relatively small and short with wide, flat or slightly concave brow, short and straight forehead and well-developed jaws. The eyes should be large protruding and well set apart. The shoulder should be well laid-on with the tips of the blades set well apart, but not prominent and covered with flesh. The neck should be short and blended well into the shoulder. The chest should be deep with well sprung ribs blending in well to the shoulders. The back should be very muscular with level topline throughout, loins thick and wide. The tail should be set slightly back and without undue prominence. The hindquarters should be very wide, plump and pendulous and well let down between the hind legs. The second thigh should be well developed with meat carried right down to the hocks. The hind legs should be set well apart with strong hocks and proper alignment. The bone should be strong, flat and well developed. The feet should be strong well shaped with adequate depth of heel and the ability to carry the great weight of the animal. The underline should be level. The body should be deep and well coupled together, evenly balanced and well-proportioned between fore, middle and hindquarters; firmly and well fleshed with hip bones well covered average skin thickness but very supple. The hair coat may be either short and silky or thick and long. The front legs should be well developed, forearm, legs straight and well set apart.

3. Geographical Territory

The geographical territory being the Republic of Ireland for the Society to conduct its breeding programme.

4. Aim of the Breeding Programme

To encourage, promote and improve the breed of Charolais Cattle in Ireland.

5. Division of the Breeding Book

The breeding book shall have a Main section only and is currently divided into four classes.

To qualify for entry in the Main section of the breeding book an animal shall:

(a) Be descended from parents and grandparents entered in the breeding book of the Irish Charolais Cattle Society or any other breeding book of the same breed
(b) Be identified in accordance with Union animal health law and according to the rules of the Society's Breeding Programme
(c) Have a pedigree established in accordance with the rules of the Society's Breeding Programme
(d) In the case of trade in or entry into the Union, the animal shall be accompanied by a Zootechnical certificate for the breed
(e) Where an animal is produced from a germinal product which is traded or which is entered into the Union that germinal product must be accompanied by a Zootechnical certificate.

The main section of the breeding programme shall be divided into four classes as follows:

Class 1: Horned animals that comply with all the characteristics of the breed. For the purpose of identification these animals are recorded with a herd prefix, the animal name and the designation category 'PED'. Example: Herd Prefix Animal Name (PED).

Class 2: Polled animals that comply with all the characteristics of the breed. These animals will be Genomic tested as homozygous polled. For the purpose of identification these animals will be recorded with a herd prefix, the animal name and the designation category 'PDP'.

Class 3: Polled animals that comply with all the characteristics of the breed. These animals will be Genomic tested as heterozygous polled. For the purpose of identification these animals will be recorded with a herd prefix, the animal's name and the designation category 'PDX'.

Class 4: Culard animals that comply with all the characteristics of the breed. These animals will be Genomic tested for the Culard gene. For the purpose of identification these animals will be recorded with a herd prefix, the animal name and the designation category 'CUL'.

The Society accepts for registration any calves resulting from a "cross" of the above Strains. Calves and their progeny born as a result of a mating between a "Horned Charolais" and a "Polled Charolais" will be categorised according to their status following genomic testing and verification. The classification of an animal may change after registration if information becomes available which would indicate the animal would have been classed differently had the information been available at the time of registration.

6. Identification of Animals

The animal's unique National ID number (TAG NUMBER) shall be used as the primary form of identification within the breeding book.

In addition, each animal registered by a member may have a herd prefix and a name, which shall have, as its first letter, the year designation letter as specified by the Council of the Society, of the year in which it was born. For this purpose, the year shall begin on 1st January. The year letter will be made available from the Irish Charolais Cattle Society. The name of all animals including spaces and denotations where relevant shall be limited to 30 letters including spaces. Inappropriate names shall not be accepted.

A breeder who is not a member is not entitled to name the animal. These animal's registered by a breeder will be identified by the generic herd prefix 'CHIRL' followed by their ID number in full.

7. Procedure for Entry into the Breeding Book

a) The birth of every calf alive or dead to any dam registered in the Society's breeding programme shall be notified within 28 days from the date of the birth of the calf, by post through the ICBF Animal Events Book to the National Calf Registration Service, Animal Events Agency, P.O. Box 72, Clonakilty (Freepost), Co. Cork, or online at www.agriculture.gov.ie. This notification can be made by the breeder or his/her representative/s. The assigning of a name to the animal notifies the Society that the animal is to be entered into the breeding book. In the case of breeders who are not members, they must complete a birth notification form for each calf they wish to register in the breeding book and submit it to the Society Office for registration. Notification forms shall be available from the Society Office upon request.

b) The Council reserves the right to refuse the notification of birth of a calf where the data provided is deemed to be deficient or inaccurate.

c) In the case of twins or multiple births, this shall be indicated for each such birth. For example, if registering calves in the ICBF animals' event book, a separate line shall be completed for each calf born alive or dead.

d) The pedigree registration fee payable shall be as the Council of the Society may from time to time decide. Payment is due within 30 days of the date of the invoice, which will be issued to the breeder after the entry into the breeding book. Late payments will be subject to additional late fees. Please see Appendix 1 for a schedule of late payment fees.

e) Requests to enter an animal into the breeding book where birth notified as per (a) above but not identified for entry into the breeding book, i.e. no name assigned, will be subject to late registration fees in addition to the normal pedigree registration and may require DNA or Genomic testing for parentage verification, at the breeder's expense. Late pedigree registration fees commence 31 days from the date of birth. Please see appendix 1 for a schedule of late registration fees. All animals over 12 months of age at the time of registration must be DNA or Genomic tested.

f) Stock bulls born on or after the 1st January 2024 who are used for pedigree breeding purposes must be parentage verified to both their sire and dam, through DNA or Genomic testing, by an approved laboratory before any progeny can be accepted for registration. AI bulls born on or after the 1st January 2021 who are used for collection of semen for pedigree breeding must have undergone a genomic evaluation and must be parentage verified to both their sire and dam. AI bulls born prior to the 1st January 2021 require sire verification only.

g) Where calves are born as a result of insemination from a bull registered in the Society's breeding programme or other qualified Charolais breeding programme, Council reserves the right to request a copy of the official insemination certificate in cases where the Inseminator is not uploading his insemination records direct to the ICBF database. If such request is made the official AI docket/s should be forwarded within 7 days of the request. All insemination certificates must be fully completed. Where more than one insemination has been made all the insemination certificates shall be forwarded. In the event of the A.I. documentation not being available the calf may have to be parentage verified by DNA or genotyping analysis carried out at an approved laboratory, prior to registration.

h) Where calves are born as a result of DIY insemination, a copy of the inseminator's licence may be required to be forwarded to the Society along with a list of straws purchased. Failure to do so, when requested, may result in the animal being parentage tested.

i) When calves are born as a result of insemination with imported semen from a bull registered in another approved Charolais breeding programme, registration or notification will only be accepted provided that a copy of the zootechnical certificate issued by a breed society, breeding body, or an organisation authorises by the relevant competent authority is forwarded to the Society. If it is found that any detail of any certificate has been changed by the owner, or someone acting on his/her behalf, the calf may be subject to DNA/Genomic

analysis for parentage verification to both its sire and dam at the owners' expense, have fines levied, or be disqualified from the breeding programme.

j) Parentage verification (sire and dam), by DNA or genotyping, of each 40th calf notified to the Society will be carried out. Laboratory costs for typing the calf and its dam will be borne by the Society.

k) In the case of calves born by Embryo Transfer, the following rules apply:

I. the donor female should be notified to the Society on form ET 1, along with a copy of her DNA or Genotype profile prior to flushing. All donor dams must have undergone performance testing or genetic evaluation.
II. the proposed sire's DNA or Genotype profile should be lodged with the Society and his pedigree does not contain any ancestors in common with the donor female at the parent and grandparent level.
III. the flushing should be carried out by an approved ova/embryo collection team
IV. details of the flushing should be forwarded to the Society on form ET 2 (embryo flushing/registration form), duly signed by the registered owner of the donor female and the representative of the approved collection team within 14 days of the flushing
V. in the case of frozen embryos, the date of thawing and implanting must be notified to the Society on form ET 4, duly signed by the owner and the veterinary surgeon.
VI. all calves born, as a result of embryo transplant must be parentage verified (sire and dam) by DNA analysis or genotyping, carried out at an approved laboratory, before the calf is 6 months old. Late registration fees will apply on ET calves not parentage verified by 6 months old. A schedule of these late registration fees is available in Appendix 1. The responsibility is on the breeder or his/her representatives to ensure the calf is parentage verified before the calf is 6 months old.

l) Whilst it is not compulsory to do so, breeders are strongly advised to DNA type their pedigree calves using genomic (SNP) technology.

m) Other control checks prior to entry of animals into the breeding book include gestation length, calving interval, herd profile checks, AI records and DNA/Genomic testing for parentage verification.

n) In the event of an error, the registration is placed in a holding category in the Society's database. Once the problem is rectified the registration will be completed. In the event of the issue not being resolved by herd book staff, the breeder is notified of the position. The breeder then must notify the Society office with the necessary amendment by phone, email or in writing.

o) From the 1st of January 2022, all animals entering the breeding book of the Irish Charolais Cattle Society from another breeding book should be tested for Progressive Ataxia. Progressive Ataxia (PA) of Charolais cattle is an inherited neurodegenerative disease

affecting the hind limbs that can gradually progress until the affected animal is unable to stand. Animals can carry no copies, one copy, or two copies of the gene. Animals who carry one copy are normal but can produce affected offspring if bred to another carrier. Double carriers are affected by the disease and must be avoided. In order to combat PA and avoid the production of double carriers, the following rules will apply from the 1st of January 2022:

- All animals entering the Society's breeding book from another breeding book should be tested for Progressive Ataxia before entry. It is advised that double carriers be culled immediately.
- All new AI bulls should be tested for PA, before an AI code will be applied for by the Society.
- It is advised that any animals tested as double carriers within the Society's own breeding book should be de-registered with the Society immediately. Breeders will receive a refund for de-registered animals who have been tested as double PA carriers (see section 11).

8. Information on the system for recording pedigrees

The system used for recording information on animals entered into the Charolais breeding book is an electronic database system known as Taurus. For each animal entered on the database the following information is recorded where applicable: name of the animal, date and country of birth, parents and grand-parents, sex, ear tag identification, name and address of breeder, name and address of owner, section of herd book and relevant class, twinning status, progeny of embryo transfer, results of performance testing, date of genetic evaluation, genetic defects and peculiarities, insemination or mating information, other relevant information to the registration process.

9. Herd Inspections

The Society reserves the right to check selected herds. The herd owner will be given 48 hours oral or written notice of the visit by the Inspector. A herd owner with a genuine reason may be allowed an extra 24 hours for the inspection, otherwise the herd owner cannot refuse admission to the Inspector unless in the most exceptional circumstances. If a herd owner refuses to co-operate in allowing an inspection within 5 working days from the date of notification, all calves in the herd under 90 days of age (at the time of the first notification) will not be eligible for entry into any Society run events for life. If any calves are moved out of the herd from the date of notification to the date of inspection, those calves will not be eligible for entry into any Society run events for life. All calves under 90 days of age and their dams must be penned for inspection and weighing. All cows in the herd must be presented for inspection. The Inspector will take a hair sample from at least one calf and its dam for DNA/Genotype parentage verification during the inspection.

Rules concerning Society run events.

- The maximum weight gain permitted for MALE Charolais calves 1 – 90 days old is 2 kg per day along with their birth weight.
- The maximum weight gain permitted for FEMALE Charolais calves 1 – 90 days old is 1.75 kg per day along with their birth weight.

Herd owners must notify in writing to the society's secretary within 5 working days, of any bull calf born with a 60 kg and over birth weight, and any heifer calf born with a 55 kg and over birth weight. If the facility for weighing calves is not available to the herd owner, the society's secretary should still be notified in writing of a 'suspected' heavy birth weight within the said period. Unless such heavier birth weights (or suspected heavy weights) are notified to the society within 5 working days of birth, they will not be taken into account for the purposes of these rules. Unless notified to the Society within 5 working days of birth, any calf which is found to be exceeding the above weight gains at any time under 90 days of age, that calf will not be eligible for entry into any Society run events for life.

10. Zootechnical Certificate

The Society shall issue to the breeders a landscape orientation of a Zootechnical Certificate for each eligible animal complying with all the entry requirements within 60 days from registration. A derogation was granted by the Competent Authority for the non-use of the model forms as referred to in Article 31 (2)(a) of Regulation (EU) 2016/1012. This derogation will permit the Irish Charolais Cattle Society to provide the Zootechnical certificate in landscape orientation. A reference to this derogation appears on the Zootechnical certificate. For all exported animals, the Society shall issue a portrait version of a Zootechnical Certificate in accordance with EU legislation were requested by the owner.

The Zootechnical certificate states the current owner's name and address, as well as the name and address of the breeder. In the context of Zootechnical certificates, the breeder is the applicant who entered the animal in the breeding book. Results of relevant genomic tests, performance testing and/or genetic evaluations are published on the Zootechnical certificate.

Myostatin results will be recorded on the Zootechnical certificate where known. A twin animal will have the circumstances of its twinning (twin to male, twin to female) published on its Zootechnical certificate or any other official documents provided by Society. An animal found to have a genetic defect or genetic peculiarities following linear assessment or herd inspection shall have details of such published on its Zootechnical certificate or any other official documents provided by the Society. In the event of an animal not being inspected breeders must notify the Society office of any genetic defect or peculiarities on an animal.

The Society reserves the right to withdraw at any time the zootechnical certificate issued in respect of male and female cattle in the Society's breeding book where entry was accepted on the basis of information subsequently found to be inaccurate or misleading.

11. De-Registration of Animals

A breeder may de-register a female, up to 12 months of age, which is still in the breeder's name and ownership by returning to the Society's office its Zootechnical certificate. The breeder shall receive a refund for this.
Males slaughtered under 16 months of age shall also be entitled to a refund, once the animal is still in the breeder's name and ownership, and it's Zootechnical certificate and slaughter docket is returned to the Society's office.
This may change from time to time, as deemed appropriate by the Council of the Society.

A breeder may re-enter an animal in the breeding book of the Irish Charolais Cattle Society. Re-registered animals shall not be allowed take part in any Society run shows or sales.

12. Imports/Exports

Imported purebred Charolais animals, from other approved Charolais breeding programmes operated by recognised EU breed societies or listed breeding bodies must be notified to the Society. The animal may be checked for correct identification purposes only by the Society's Inspector before being entered in the breeding programme. The registration fee (amount shall be as the Council may from time to time decide) and an official Zootechnical certificate must be forwarded to the Society. The animal will be entered into the corresponding section and class of the breeding book.

Imported semen may be used subject to compliance with statutory regulations and lodgement of an official zootechnical certificate for the semen and donor sire's DNA/Genotype certificate with the Society. Until this is done no offspring by this sire will be accepted for entry.
Imported embryos must comply with statutory regulations. There are no restrictions on the registration of calves from imported embryos provided:

(a) Appropriate zootechnical certificate from the country of origin is submitted to the Society
(b) Appropriate procedures for registration of an ET calf is carried out (see section 7 above)
(c) Usual registration fee for an imported animal is paid

Where the Purchaser/Exporter requires a Zootechnical Certificate to accompany the export of an animal that has been entered into a breeding book they should contact the Society. Where the Purchaser/Exporter requires a Zootechnical Embryo certificate they should contact the Society where the relevant embryo collection or production team are not listed in section 18 below.

13. Transfer of Ownership

Breeders or their representative/s shall inform the Society of the sale of any of their purebred cattle. They shall complete the transfer form on the Zootechnical Certificate and forward this to the Society for noting and onward transmission to the new owner. The transfer fee payable on females shall be as the Council of the Society may from time to time decide. Please see appendix 1 for female transfer fees. There is no transfer fee on males. Except in the case of a calf at foot, all purchased stock must be officially transferred through the Society's office into the new owner's herd at least 6 months before being eligible for entry into any Society run show and/or sale.

14. Breeding and Selection Objectives

Breeding Objective:
To make Charolais the number 1 beef breed in the Republic of Ireland and maintain that position into the future through genetic gain, breed development, promotion, and progression.

Terminally Charolais should exhibit traits such as:

- Easy calving: Ideally Charolais should not need assistance at calving.
- Short gestation: Gestation length should be as short as possible. The target gestation length for Charolais cattle should be 282 days.
- Good carcass confirmation: Charolais cattle should grade from an R+ to an E= at slaughter.
- Good feed efficiency: Charolais cattle should gain weight as efficiently and cost effectively as possible. Ideally with little feed input.
- Good carcass weight: The target weight gain from birth to slaughter for pedigree Charolais males should be 1.8kg/day. The target weight gain for pedigree Charolais females should be 1.5kg/day.

Maternally Charolais should exhibit traits such as:

- Good milk ability: Charolais females should produce as much milk as possible to increase the weaning weight of their calves. Ideally, Charolais cows should wean calves that are 40% of their live weight.
- Good fertility: Ideally Charolais females should calve under 30 months of age, with a target age at first calving of 24 months. Charolais females should have a target calving interval of 365 days or lower.
- Good calving ability: Ideally Charolais females should not need assistance at calving.
- Low maintenance: Charolais females should maintain their body weight as efficiently and cost effectively as possible.
- Longevity: Ideally Charolais females should produce at least 8 live calves in their lifetime.

These core breeding principles should always coincide with selection for docility and functionality, as well as key breed characteristics, such as soft hair, a wide muzzle, alert ears, and a sweet square Charolais head.

Selection Objective:

When selecting what to breed for, breeders should aim to breed an animal that maintains the original Charolais breed characteristics, contributes to economic efficiency, and displays quality in its conformation making it the number one beef breed and terminal sire in Ireland.

Breeders should select animals based on their physical appearance, pedigree, and their ICBF Eurostar indexes. Information on how the ICBF Eurostar indexes are calculated which provides information on their economic efficiency can be found here - https://www.icbf.com/wp/wp-content/uploads/2019/05/Beef-Evaluation-Document.pdf. Each animal in the breeding book will carry a Eurostar value for each of the traits and it is important breeders take into account the reliability of these values when making selection decisions.

Another selection consideration is the presence of the Myostatin gene. Myostatin is a gene that influences the production of proteins which control muscle development. Currently in cattle, there are 19 known mutations of the gene, however, research to date has shown that there are two common mutations of the gene in Charolais cattle – F94L & Q204X. If a Charolais has one copy of either variant (one allele) it is termed heterozygous, if it has two copies of either variant (two allele) it is termed homozygous. The F94L is a variant commonly known as the "Profit Gene". This variant has been found to increase the size of muscle fibres with no associated increase in calving difficulty, or lowered fertility or longevity. Variant Q204X is more commonly found in the Charolais breed. Homozygous animals exhibit greater loin depths, large, rounded rump & thighs, reduced fat cover & greater meat tenderness. However, they may also have heavier birth weights & slightly reduced milking ability & calving ability in females. Heterozygous animals have been found to exhibit the above characteristics albeit to a lesser extent.

Knowing the myostatin status of an animal will help breeders select breeding animals with the most appropriate myostatin traits for their breeding programme. This will inevitably improve calving ease, carcase conformation and quality, without compromising on key maternal traits, such as milk and fertility. Breeders can request the myostatin status of their animals directly from Weatherby's Scientific or the Irish Cattle Breeding Federation, once that animal has been genomically tested. The Society requires that all animals entered in official Society Sales are Myostatin tested. These results are recorded on the Taurus database. Where known, Myostatin results are also recorded on the animal's Zootechnical Certificate.

The Society offers breeders a refund on both purebred males and females, in order to improve the quality of animals retained in the herd for breeding (see section 11).

To assist in the selection of breeding animals the Society has a Breed Improvement Officer who will advise and assist breeders in all areas of breed improvement.

The Society regularly publish Yearbook's and AI Sire Directories with information on all AI bulls available for pedigree breeding. These are made available in hard copy format and online at www.charolais.ie.

15. Performance Testing and Genetic Evaluations

The following data is collected on animals in the breeding book as part of performance testing:

(a) Calving Survey – Each member or their representatives record calving data on each purebred calf registered through the Animal Events recording system. The Calving Survey options are as follows: 1 = Normal Calving, 2 = Some Assistance, 3 = Considerable Difficulty and 4 = Vet Assistance. 'Calf died at birth' may also be recorded. This data is used in the calculation of the calving difficulty of an animal.

(b) There are government funded performance recording programmes available to breeders, such as the current Suckler Carbon Efficiency Programme (SCEP). The current SCEP programme involves the weighing of cows and their calves at weaning time to determine their environmentally efficiency. It also involves breeders Genotyping a percentage of their animals every year in order to increase the reliability of the genetic evaluations. More information on the scheme can be found here –

gov - Suckler Carbon Efficiency Programme (SCEP) (www.gov.ie)

(c) Whole Herd Performance Recording (WHPR): WHPR is a performance recording programme currently available to breeders. It involves an ICBF scorer visiting the herd once a year and recording performance data on all purebred animals in the herd.
The following data is recorded on a visit:

- Animals under 150 days old are weighed.
- Animals from 150 – 700 days old are scored and weighed.
- Cows with calves suckling are weighed and scored.
- Cows with no calves are checked, whether in milk or not.
- All cows are checked for evidence of C-Sections.

The following are a list of morphological traits which are recorded on pedigree animals at a WHPR visit.

Genetic Evaluation use		Traits recorded	Pedigree Males & Females 1-149 days	Pedigree Calved Females 1st Scoring	Pedigree Calved Females 2nd+ Scoring	Pedigree Males & Females 150-700 days	Dry Cows & Uncalved Females	Panel Section (Functional, Skeletal, Breed Quality, Muscle)
Replacement & Terminal €uro-Stars	1	Weight (kg)	Yes	Yes	Yes	Yes		
	2	Width at Withers				Yes		Muscle
	3	Width Behind Withers				Yes		Muscle
	4	Loin Development				Yes		Muscle
	5	Dev Hind Quarter				Yes		Muscle
	6	Thigh Width				Yes		Muscle
	7	Height at Withers				Yes		Skeletal
	8	Length of Back				Yes		Skeletal
	9	Pelvic Length		Yes		Yes		Skeletal
	10	Width at Hips				Yes		Skeletal
	11	Docility		Yes	Yes	Yes		
	12	Milkability (1-5)*		Yes	Yes			
Func BLUP	1	Fore Legs Front View		Yes		Yes		Functionality
	2	Hind Legs Side View		Yes		Yes		Functionality
	3	Hind Legs Rear View		Yes		Yes		Functionality
	4	Locomotion		Yes	Yes	Yes		Functionality
Cow Traits	1	Teat placement		Yes	Yes			
	2	Teat size		Yes	Yes			
	3	Udder suspension		Yes	Yes			
Other Traits (As decided by each Breed)	1	Width of Pelvis		Yes		Yes		Skeletal
	2	Rump angle		Yes				Breed Quality
	3	Width at Pins		Yes		Yes		Skeletal
	4	Condition score		Yes		Yes		Muscle
	5	Dev Inner Thigh (1 to 15)				Yes		Muscle
	6	Width of Chest				Yes		Skeletal
	7	Canon Bone Thickness				Yes		Breed Quality
	8	Depth of Chest				Yes		Skeletal
	9	Level of Back				Yes		Functionality
	10	Width at Hips				Yes		Skeletal
	11	Harmony				Yes		Breed Quality
	12	Width of Muzzle				Yes		Breed Quality
	13	Colour of Head				Yes		Breed Quality
	14	Type of Head				Yes		Breed Quality
	15	Girth				Yes		Breed Quality
	16	Rib						Breed Quality
	17	Plates						Breed Quality
	18	Depth of Rump (1 to 10)				Yes		Breed Quality
	19	Tail Set						Breed Quality
	20	Colour of Tail						Breed Quality
	21	Depth of Hoof						Breed Quality
	22	Scrotal Circumference				Yes		Breed Quality
	23	Colour of Coat				Yes		Breed Quality
	24	Hair Type						Breed Quality
	25	Shoulder Muscle (1 to 15)						Breed Quality
	26	Top Muscle (1 to 15)						Breed Quality
	27	White Patches						Breed Quality
	28	Skin Thickness						Breed Quality
Edit Info	1	Cow in milk (rearing a calf): Y/N		Yes	Yes		Yes	
	2	Mastitis on Day of Scoring (Y/N)		Yes	Yes			
	3	Mastitis Since Last Calving (Y/N)		Yes	Yes			
	4	Evidence of C-section Last Calving: Y/N		Yes	Yes		Yes	
	6	Lameness on day of scoring (Y/N)		Yes	Yes			
	7	Lameness since last calving (Y/N)		Yes	Yes			
	8	Sick on the Day of Scoring (Y/N)	Yes	Yes	Yes	Yes		
	9	*16 Extra Indicators (below)	Yes	Yes	Yes	Yes		

The above traits are used in the calculation of an animal's 'Linear Type'. They are grouped into three categories, Muscle, Skeletal and Functional. These breeding values can be found by clicking on the 'Linear Type' section in the Animal Search engine through the Society's

Online herd book or the ICBF website. More information on WHPR can be found at - https://www.icbf.com/wp/wp-content/uploads/2020/03/WHPR-application-form-March-2020.pdf.

(d) Herd Plus: for breeders signed up to ICBF's Herd Plus, they can input and record on farm weights of their purebred Charolais animals. This allows breeders to measure the on-farm performance and efficiency of their animals. They can also record important information such as insemination dates and reasons for culling.

(e) Other data sources: ICBF obtains other performance data from different sources including the DAFM's Animal Events systems, Meat Factories, and Livestock Marts. This data includes calving interval, age at first calving, insemination dates, gestation lengths, carcass weights, confirmation grades, age at slaughter, weaning weights and so on. All this data is used in the process of genetic evaluations.

Genetic Evaluations:

At present ICBF produce Euro-Star indexes which quantify the genetic component of an animal's performance across all traits of importance for Irish suckler farmers. These indexes will appear on the ICCS On-Line breeding book which is available on the official Society website www.charolais.ie and also on any relevant publications such as sales catalogues. The Society avails of this facility for making use of livestock performance data. These Euro-Star Indexes are in turn utilised as a breeding index to aid beef farmers in the selection of breeding animals.

ICBF calculates an animal's €uro-Star index based on all available ancestry, performance and genomic data. A purebred animal has 3 main indexes and several sub-indexes. Each index has a different purpose. The three main indexes are:

Replacement Index: To breed future cows for the suckler herd. The replacement index estimates how suitable an animal's daughters will be for calving ability, milk, fertility, and ultimately being low maintenance suckler cows. Cow contribution accounts for the performance of direct daughters for Milk, Calving Interval, Cull Cow Weight, etc. Calf Contribution reflects the performance of the progeny of daughters for traits such as Feed Intake, Carcass Weight, Carcass Conformation.

Terminal Index: To breed beef animals from the suckler herd that are destined for slaughter. The principle of the terminal index is based on low costs of production, i.e. low cost associated with calving, low mortality, short gestation, less feed consumed per kilogram of carcass and as high a return on the carcass as possible. In short, the terminal index estimates how profitable an animal's progeny will be with regards to live weight, carcass conformation and being finished for slaughter.

Dairy Beef Index: To breed beef animals from the dairy herd that are destined for slaughter. The Dairy Beef Index (DBI) is a tool to produce quality beef cattle from the dairy herd that have both

desirable calving attributes for the dairy herd (i.e., easy calving and short gestation) and valuable carcass merit attributes for the finisher.

More information on the Eurostar Indexes can be found here - Beef-Evaluation-Document (1).pdf

The following are the weightings of the traits in these indexes:

Index Trait Weightings			
	Replacement	Terminal	Dairy Beef
Calving	16%	26%	64%
Carcass	39%	56%	27%
Fertility	23%		
Milk	18%		
Docility	4%	2%	
Feed Intake		16%	
Other			9%

€uro-Stars Explanation		
5 Stars	★★★★★	An animal is in the top 20% of the breed for that traits
4 Stars	★★★★	An animal is in the top 40% of the breed for that traits
3 Stars	★★★	Average Genetic Index
2 Stars	★★	An animal is in the bottom 40% of the breed for that traits
1 Star	★	An animal is in the bottom 20% of the breed for that traits

When reading the indexes associated with each animal it is very important to take note of the reliability figure associated with them. Low reliability figures mean low levels of data thus the figures may change considerably in the future (either up or down). It is also important to note that the indexes of all animals may change over time, and they are only a guide at all times.

Genomics:

Genomics is studying DNA (Genotype) to help better predict how well an animal will perform in the future. DNA is passed from parents to offspring and is therefore central to breeding. The DNA profile of an animal is analysed and is compared to the DNA profiles of older proven animals also known as the reference population and looks for similarities. Performance data, ancestry data and genomic data are combined on the animal itself generating a more accurate prediction of the animal's genetic make-up. Breeders can genotype animals privately by ordering a Genomic test kit directly from ICBF. Alternatively, genomic testing programmes such as the Suckler Carbon Efficiency Programme (SCEP) or the National Genotyping Programme is available to breeders at present. These programmes incentivise breeders to genotype which will ensure pedigree

verification and inevitably lead to overall genetic gain of the pedigree and national suckler herd. More details on the ICBF Genomics service can be found at: https://www.icbf.com/what-is-genomics/

Breeders must permit that the data relating to the genealogy and performance of their cattle may be communicated to and examined and processed by competent authorities in the field of livestock breeding, subject to Council's approval, and the Society be free to disseminate the results of this analysis as the Council see fit from time to time.

Methodology:

ICBF beef genomic evaluations are published weekly. This means genomic evaluations are published for beef animals whose genotypes are received in the ICBF database a week previous. Animals which already have a genomic evaluation will only be updated on a full evaluation run (every 2 months). The ICBF Animal Evaluation unit uses SAS for pre-processing and post-processing of data before and after the genetic evaluation run itself. 'Mix 99' is used for variance component estimation and for the actual running of the genetic evaluations. The animals most recent ancestry, performance, and genomic data available is included in these evaluations. For more information on the ICBF publication schedule go to

Communication:

Information on animal's genetic evaluations is available to breeders through the following sources:

ICCS Online herd book - https://webapp.icbf.com/v2/herdbook/index.php?source_org=CH
ICBF Animal Search - https://webapp.icbf.com/v2/app/bull-search/
Herd plus reports
Zootechnical Certificates
Breed Society Sale Catalogues
Participating Mart Boards

16. Outsourcing of Technical Activities

The Irish Charolais Cattle Society outsource certain technical activities to the Irish Cattle Breeding Federation (ICBF). ICBF provide

1. The Taurus database which contains all data relevant to the Irish Charolais Cattle Society Breeding Programme.
2. All genetic evaluations for the Irish Charolais Cattle Society.

ICBF's contact details are:

Irish Cattle Breeding Federation,
Link Rd,
Ballincollig,

Co. Cork.
P31 D452
Tel: 00353 23 8820452
Email: query@icbf.com
www.icbf.com

17. Derogation Article 31

A derogation was sought and granted by the competent authority to permit named semen collection or storage centres, or named embryo collection or production teams to issue a Zootechnical certificate for germinal products based on the information the society has provided.

The following being a list of the named approved centres/teams:

Dovea AI, Bova AI, NCBC, Coney Island Genetics, Munster AI Farm Services, Eurogene AI, Sligo AI, Dunmasc Genetics, Elite Pedigree Genetics, XYZ Genetics, Celtic Sires, Bull Bank, K Genetics, Champion Embryos, Genecel Ireland Ltd, Mr. Laurence Dunne MVB, MRCVS, Bovi Genetics (trading as Cowmaster Ltd), Mr. J.F. Brody, Bova Embryo & Scanning Technologies, Dunmasc Genetics, Animal Reproductive Technologies Ltd, Gerard Beirne, Thomas Griffin, Glencoyne Genetics, Daire Markham MRCVS.

18. Semen Royalties

From the 1st January 2022, the Irish Charolais Cattle Society will accept no new bulls onto their Semen Royalty scheme. Royalty fees will only be collected on bulls approved prior to this date.

Purebred calves sired by AI from any Semen Royalty bulls and born after the semen royalty begin date and subsequently entered into the breeding programme to the society, will have an additional royalty fee applied payable by the breeder of the calf.

Collection of Semen Royalty Fees:

Semen Royalty fees will be collected by the ICCS as an agent of the bona fide owner of the bulls AI pedigree semen rights.

Payment of Semen Royalty Fees:

Royalty fees to the semen rights owner will be paid direct to his/her account minus the admin fees collected by the ICCS Office. Release of monies from the Charolais account to the semen rights owner will be arranged at regular intervals, currently twice a year. The Society will not collect royalty fees for more than one bona fida owner. If ownership of the bull's semen royalty is transferred, the AI semen rights must either be retained in total by the vendor or transferred in total to the purchaser at an agreed date of the birth of the progeny. Where the semen rights are

transferred to the purchaser, this must also include the right to claim all royalties on all semen, which has been sold prior to the transfer of the bull and resulting births of calves after the agreed date of transfer.

Any breeder who refuses to pay semen royalty fees within 7 days of a final demand duly conveyed to him/her by registered post, may at the discretion of the Council be barred from conducting further herd book business with the Society. Agreement for non-payment of royalty fees may be made between the semen rights owner and the member provided that the details of such an agreement are disclosed to the society in writing and signed by both parties.

Females sold in-calf to a Semen Royalty bull:

Where females are sold that are in-calf to a Semen Royalty bull, the purchaser shall be responsible for the payment of the semen royalty fee due on entry of any resulting off-spring into the breeding book.

19. Disclaimer

The Society, its servant or agents shall not be responsible for any injury, loss or damage to any person, animal or property occurring during or as a result of inspections, weighing, linear scoring, the carrying out of the Society's breeding programme or any other Society related activity.

While the Society will endeavour to keep members informed of changes to these rules, it is the sole responsibility of members to keep themselves fully informed of current rules.

Appendix 1

Schedule of registration fees for breeders:

Registration fee per calf:
€120 payable by Cash/Cheque or EFT
€160 for an E.T. calf registration (Embryo Transplant)

Schedule of registration fees for members:

Registration fee per calf:
€60 if paying by Cash/Cheque
€45 if paying by direct debit
€80 for an E.T. calf registration (Embryo Transplant)

Schedule of late fees:

Late payments will be subject to the following additional fees:
€10 per month for the first 12 months
€20 per month for the next 12 months
€30 per month for the next 12 months
€40 per month for the next 12 months

Late registrations will be subject to the following additional fees:
€10 per month for the first 12 months
€20 per month for the next 12 months
€30 per month for the next 12 months
€40 per month for the next 12 months

Other Society Fees:

Re-registration fee: €60
Female Transfer Fee – €25
Male or Female Import Fee – €75
Export Zootechnical Certificate Fee – €20
Embryo Application – €127

April 2024