



Breeding programme Irish Blonde d'Aquitaine

REV 4-10/11/22

The Irish Blonde d'Aquitaine Cattle Society Co-operative Limited, here after known as the "Society", shall maintain one or more registers as follows:

- a) A register of the particulars of the pedigree, status and performance of eligible Blonde D'Aquitaine purebred breeding animals here after known as the "Animals" (1 or more).
- b) Such information as the Council may from time to time decide.

1.Name

The name of the breed is Blonde d'Aquitaine (Blonde)

2.Aim of the Society

The aim of the breeding programme is to preserve and improve the Blonde D'Aquitaine breed by adhering to a strict breeding programme which maintains the breed characteristics and using all available technology to improve the breed.

3.Geographical territory

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

4.Breed Characteristics:

The Blonde D'Aquitaine is a true beef breed whose cattle have well developed bodies, the principal features of which are the well-proportioned bone structure, thick well-rounded muscle and exceptional length of body. Adult cattle weigh between 1300 and 1500kgs in the case of bulls and from 850 to 1100kgs in the case of cows.

Coat: One colour- wheat, varying from light to dark, often mottled, with rings of lighter colour around the eyes and muzzle, inside the thigh, on the belly and over the cannon bones; pale pink mucous membranes with no brown ring; light coloured hooves.

Body: Very long and well proportioned; rather fine bone, good stance permitting ease of gait.

Back: Broad and level, thick well fleshed loins almost level with the rump.

Hind part: Very well fleshed, broad pelvis longer than broad, tail not projecting, well developed udder, outside thick thigh, especially at the top, rounded hindquarters well let down to the hocks.

Fore part: Well fleshed, broad withers, deep barrel with well sprung ribs, shoulders well laid in.

Head: Expressive and light, with a straight or slightly convex profile, triangular face, broad forehead and muzzle.

5 Division of Herd Book

The Herd book is composed of a main section only.

Animals eligible for entry in the Society's Herd Book of purebred Blonde D'Aquitaine cattle shall be:

- those whose parents and grandparents are entered in the main section of a breeding book of the same breed.
- identified at birth according to Union animal health law and the rules of the breeding programme
- have a pedigree established in accordance with the rules of the breeding programme

where an animal is traded in or entered into the Union and is intended to be entered in the breeding book, the animal shall be accompanied by a zootechnical certificate.

where an animal is produced from a germinal product which is traded in or which entered into the union and where that animal is intended to be entered in the breeding book that germinal product shall be accompanied by a zootechnical certificate.

The herd book shall be divided into two classes.

Premier Class: These animals are free from gentle genetic defects and comply with all characteristics of the breed.

Class2: These are animals which meet the minimum criteria for entry into the herd book but are carriers of genetic defects and/or have undesirable breed characteristics.

Progeny of a female registered in Class 2 (PE2) can be registered in the premier class (denoted as "PED" on the zootechnical certificate) but only after inspection by the society appointed field person and DNA parentage verification. Progeny from a male registered in Class 2 (denoted as 'Pe2' on the zootechnical certificate) cannot be registered in the premier class. The Society reserves the right to re-classify animals at the discretion of the Council.

The Society will register any female calf born twin to a male in Class 2 of the herd book until such time as this female has been proven to be in calf. A female calf born twin to a male should be notified to the society via the animal events system as usual. If the female is subsequently proven to be in calf, the owner may apply to the Society to have her registered in the premier class of the herd book.

System of identifying animals.

All animals are individually identified by their national identification number which is located by ear tag. All breeding animals are named which consists of the breeder's prefix and the name which commences with a year letter relevant to the year of birth i.e., 2020 births commence with the letter "O". The year letter is available from the Irish Blonde D'Aquitaine Cattle Society. The prefix and name of animals including spaces and denotations where relevant shall be limited to 30 characters including spaces. Inappropriate names shall not be accepted

7. Procedure for entering animals, progeny of embryo transfers and imported animals in the breeding book:

a) Procedure for Entry of animals

- The birth of every calf alive or dead to any dam registered in the breed book shall be notified to the Society through the Animal Events recording system by the breeder or his/her representative/s within the prescribed time allowed by the Department of Agriculture, Food & the Marine. There after late birth notification fees will apply. Registration fees and late birth registration fees as approved by Council from time to time are attached in Appendix 1.

- The completed Animal Events Sheet or On-Line Registration must include all necessary information to enable the pedigree registration to be completed, including a name for the animal the first letter of which shall be that of the year letter in which the animal is born. For example, in 2020 all names shall begin with 'O'.

The sire and dam of the animal must be submitted along with the date of birth, the sex and whether born easily or requiring assistance

- 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.

B) Procedure for registering embryos

- No calf born by Fertilised Ovum Transplant (FOT) will be entered in the Society breeding book unless all the conditions stated in these rules have been fully satisfied as follows:

Basic qualifications for Sires and Donor females used in FOT in Ireland

(i) Donor Females

- All Donor females must be entered in the Society breeding book and sire and dam verified by DNA. And have undergone performance testing or genetic evaluation.

(ii) Sires •

All Sires must be entered in the Society's breeding book and sire and dam verified by DNA.

- In the case of an A.I. bull, the straws imported or produced in Ireland, the bull must have a valid ICBF issued A.I. code and be sire and dam verified by DNA. And have undergone genetic evaluation.

(iii) Recipient Dam

- The recipient dam is only identified by the National Identification Number.

Embryo Registration

- Each embryo that is either frozen or implanted is to be registered with the Society by the submission of triplicate embryo registration certificate form, which must be properly and accurately completed and signed by the owner of the donor female and signed and stamped by the representative of a Department of Agriculture, Food and the Marine approved embryo collection team.

- Part A of the triplicate form must be sent to the Society within twenty-eight days of the completion of the embryo collection procedure be it direct recovery or other appropriate technique and be accompanied by the appropriate fees (Appendix 1).

- Part B of the triplicate form is retained by the approved embryo transplant team.

- Part C of the triplicate form is retained by the breeder.

- Part A must arrive at the Society office within 28 days of the embryo(s) being flushed.

Reporting of Changes of Circumstances

- The Society is to be informed of the following changes of circumstances as soon as they occur.

In the case of a frozen embryo, if it has been;(i) thawed and implanted(ii) transferred to a new owner(iii) destroyed)

In the case of a Recipient Dam, if it has been:

(i) transferred to a new owner

(ii) destroyed

- Changes of circumstances are to be notified on an Embryo Amendment Form. Changes of Circumstances of embryos is a mandatory procedure.

The transfer of embryos into recipient dams must be completed by embryo collection and production teams approved by the Department of Agriculture, Food and the Marine.

Birth Notification of Calf born by Embryo transfer.

- The birth of every calf alive or dead born as the result of embryo transfer shall be notified to the Society through the Animal Events recording system by the breeder or his representative within the prescribed time allowed by the Department of Agriculture, Food and the Marine. Such notification includes provision for details of both the donor dam and recipient dam

- At the time of birth notification, the breeder's copy of the Embryo Registration form (Part C) must be submitted to the Society office

- All calves born by Embryo Transfer must have its parentage sire and dam verified by an approved DNA laboratory.

Importation of Embryos

- The Society will not enter imported embryos or accept into the breeding book the progeny resulting from any such importation unless the requirements below and statutory regulations have been adhered to.

- On importation, embryos must be immediately registered with the Society on submission of a Zootechnical Certificate issued by the Breeding Society or the Embryo production and recovery team as appropriate of the exporting country.

- Change of Circumstances of Imported embryos must also be notified to the Society as set out above.

Exportation of Embryos

- A derogation has been granted to the Irish Blonde cattle Society to authorise embryo collection or production teams to issue a Zootechnical certificate in the exportation of embryos.

Procedure for Entry of imported animals

- Imported animals will only be accepted into the breeding book on submission to the Society of a Zootechnical Certificate from the country of origin. Admission into the herdbook is subject to a fee as set out in Appendix 1.

The Society has the right to inspect imported animals to establish the class of the herdbook whose criteria the animal meets.

Withdrawal of entry of an animal from the breeding book:

A breeder may deregister an animal provided the animal is their property and where the animal has no progeny entered in the herd book for the breed (up to 20% of the breeder's total registrations in that year). The process to deregister is notification of de registration to the Association office and return of the Zootechnical Certificate. An animal may be re-registered where it is accompanied by the appropriate fees. An animal will be re-entered if it meets the conditions of entry into the relevant section of the breeding book (see section 5 above division of herdbook). It will not be subject to consent from the person that deregistered it.

Note:

Registration fees and late registration fees as approved by Council from time to time will apply to all registration activities.

The Society reserves the right to cancel or refuse an animal entering the breed book where registration has been made based on information subsequently found to be inaccurate, misleading or deficient. In the event of an error on submission of any of the information the registration is placed in the on-hold category in the Society Database and once the problem is rectified the registration will be completed. If, however the problem cannot be resolved by Association staff the breeder is notified of the position. The breeder must then notify the office by phone, Email or in writing the required information to resolve the matter.

Control checks for recording pedigree of the breeding animal:

- Every 50th calf notified to the Society shall be required to be DNA typed to confirm sire and dam parentage and the next 3 pedigree calves born in that herd must be notified to the Society within 48 hours.

- The Society reserves the right to inspect every 50th calf notified to the Society. The inspection procedure may include the collection of photographic evidence and the collection of root hair follicles for DNA processing.

- All bulls used for breeding purposes must have been DNA typed (sire and dam verified) by an approved laboratory, before progeny can be accepted for notification of birth. In the case of an A.I.

bull, the straws imported or produced in Ireland, the bull must have a valid ICBF issued A.I. code and be both sire and dam verified through DNA and have undergone a genetic evaluation.

Calves born after a 310day gestation length or longer are subject to a DNA parentage test.

- Where a breeder is a DIY operator, the Society may carry out random checks for checking progeny, and request for a list of straws that the breeder has purchased and keep a copy on their file.

Likewise, for situations where AI technicians are not using handhelds, the Society may request the breeders to submit copies of AI docketts as evidence of insemination relevant to the registration.

- All calves born by Embryo Transfer shall have its parentage (sire and dam) verified by an approved DNA laboratory.

- Imported semen may be used subject to compliance with the statutory regulations and providing a copy of the Zootechnical certificate which accompanied the semen(where the donor bull is not entered in the Society's herd book)and its DNA certificate is lodged with the Society . Semen may not be used until avail AI code from ICBF is issued.

The DNA certificate shall contain the results of the DNA test with a reference number. Until this is done no calves by this animal will be accepted for registration.

- The Society reserves the right to carry out herd inspections in such circumstances where it is deemed necessary. The objective of herd inspections is to maintain the integrity and rules of the herd book.

Herd inspections will be carried out by a field officer, authorised by Council. The authorised officer will carry out the inspection accompanied by a competent independent person. Inspectors will act in an independent and non-discriminatory manner and will not inspect stock in which they may have a vested interest.

The Society and its servants shall not be responsible for any injury, loss or damage, to a person or property, occurring during or arising out of such inspections

- Other control checks are carried out in relation to transfer fees outstanding, membership fees owed, DNA outstanding or any other issues which may warrant further investigation and place the registration of an animal on hold until the issue is resolved

9)Information on the system for recording pedigrees of purebred animals:

The system used for recording pedigrees of purebred animals 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.

10) Selection and Breeding objectives

The breeding objectives:

- a) To establish the Blonde d'Aquitaine breed as a mainstream breed in the Irish beef sector, by producing cattle that improve the income of the Irish beef farmer, through increased growth, Carcase traits and Feed efficiency
- b) To promote and help breeders improve the breed through the importation of mainly semen from the French Maternal programme from our French partners AURIVA FRANCE.

Selection Objectives

The traits to be recorded in relation to the selection objectives are, a functionally correct animal, docile with good conformation, beefing ability with good depth of loin, length, depth and round of hind quarter, width of the hind quarter and width at the withers.

Maternally the females must have good pelvic width to enable calving ability, milk ability, neat udders and good teats, fertility, good functionality, longevity and still possess good terminal traits such as carcass conformation, high growth rates and kill out % and a high cull cow value .

These traits are all identified, measured and the results published in the ICBF Eurostar indexes.

The Eurostar index allows the Society to monitor the success of the breeding programme in respect of the aforementioned traits.

11. Performance testing and genetic evaluations:

The Irish Blonde society undertake 'Performance Testing' and 'Genetic Evaluation' as part of their breeding programme. These services are made available to breeders and are provided by ICBF.

3 main objectives for the Blonde d'Aquitaine breed:

1. Replacement: To breed future cows for the Blonde d'Aquitaine suckler herd.
2. Terminal: To breed terminal sires for progeny that is destined for slaughter.
3. Dairy Beef: To breed terminal sires for progeny from the dairy herd that is destined for slaughter.

Performance Testing

The following data is collected as part of performance testing

1. Calving Survey

Each Breed Society member records ancestry and calving data on their calves through the 'Animal Events' recording system. The Calving Survey options are: 1=Normal Calving, 2=Some assistance, 3=Considerable difficulty, 4=Vet assistance. 'Abortion or 'Calf died at

birth may also be recorded.

This data is used in the calculation of calving difficulty of an animal.

2. Liveweight & Morphological traits

Whole Herd Performance Recording (WHPR) is available to Breed Society members to participate and is a process through which breeders can get relevant liveweight and morphological trait data recorded on their pedigree animals.

These traits are used in the calculation of an animal's 'Linear Type' breeding values. They are grouped into 'Muscle', 'Skeletal' and 'Functional'. The breeding values of an animal in a herd participating in WHPR can be found by clicking on the 'Linear Type' page in an animal's 'Animal Search' output on the Society's Live Herd-book or the ICBF website.

Data collected on Liveweight & Morphological traits provides a strong base of accurate phenotypic data and can increase the accuracy and the reliability % of an animal's Euro-Stars.

Genetic Evaluations

The ICBF beef evaluation system uses Euro-Stars as its main method of breeding value output.

The Euro-Star Index is a breeding index designed to aid beef farmers in the selection of more profitable breeding animals. Euro-Star Indexes quantify the genetic component of an animal's performance across all traits of importance. The Euro-Star Index has two overall indexes – the Replacement Index and the Terminal Index. Breeders can use the appropriate index for their animals depending on their farming systems i.e., breeding replacements or for beef.

Replacement Index: There are 17 traits included in the Replacement Index. Each trait has its own Predicted Transmitting Ability (PTA). An animal's PTA is the amount of a trait that it can pass on to its progeny. The PTA for each trait is then multiplied by the Economic Weight (monetary value for each unit of the trait) to generate a Euro value contribution for the trait. All the values are added up to provide an overall Replacement Index.

Terminal Index:

There are 8 traits included in the Terminal Index. Each trait has a PTA and an Economic Weight which are multiplied to give the Euro value contribution of that trait. All the relevant trait contributions are added up to provide an overall Terminal Index.

Maternal Bull breeder Programme and Progeny Testing

Progeny of new young Blonde D'Aquitaine sires are tested annually as part of the Gene Ireland Beef Programme. These high index bulls are selected on the basis of genetic potential for good milk & fertility (in their daughters) and good growth & conformation (in calves from these daughters) and in consultation with the breed society. The animals are purchased from Blonde breeders and entered to a bull stud for semen collection. One thousand doses of semen are taken from each bull. The data recorded includes insemination records, calving difficulty, birth weights, docility, growth rate, female milk and fertility. Since 2019 the preferred Bulls used on test are Maternally proven French bulls i.e. Hashtag imported 2020.

Commercial progeny of these bulls purchased by Gene Ireland and moved to the ICBF progeny performance test station in Tully. These animals will be measured on traits that include growth potential measured through weight gain vis a vis feed consumed, visual muscle and skeletal measures (linear scoring), docility and functionality (also measured by linear scorers), ultrasound fat and muscle, and finally feed intake which allows a cost of production to be placed on the output traits. At the end of the test they are slaughtered and slaughter/carcass data recorded. Finally, traceable meat cuts are assessed for meat eating qualities.

Further details can be found on

https://www.icbf.com/wp/?page_id=227

All information is combined at the end of test with previous performance tested animals and with commercially recorded data including calving and gestation information, weaning weight and calf value from the livestock marts, linear type classification from pedigree beef herds, carcass weight, carcass fat and carcass conformation data from the factories, as well as pedigree ancestry information. These results allow a genetic profile of all animals with records and related animals to be computed in the form of a Euro-star index.

Genomics

The Society facilitates the usage of genomics by breeders to help better predict how well an animal will perform in the future from an earlier stage. Genomics can increase reliability figures (by about 20%) even before animal performance data becomes available, provides accuracy to gauge potential performance of the animal from the genetic traits and confirms parentage of the animal (assuming parents are genotyped) or can predict a sire.

More details on the ICBF Genomics service can be found at:
https://www.icbf.com/wp/?page_id=7876

Methodology

ICBF extracts the performance, pedigree and genotype data from the database 6 times per year. 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 ICBF genetic evaluations are computed 6 times per year. Further information on the genetic evaluation schedules can be found at: https://www.icbf.com/wp/?page_id=11285. The rules and standards applied for genetic evaluation are those established by Interbull. Further details can be found at:

https://wiki.interbull.org/public/beef_guidelines?action=print&rev=64

Communication and Use of Performance Testing and Genetic Evaluations Results

The star rating system (1-5 stars where 5 stars being good, 1 star being poor) is incorporated into the Euro-Star Index to assist breeders in assessing the results for their breeding animals and using this information when considering their selection objectives. However, breeders must note

- Stars 'within' and 'across' breed stars.
- Star rating are assigned to multiple indexes and traits
- The PTA for the specific index or trait first.

The Trait Emphasis is the average contribution of each trait to the index of the average, proven AI bull. Breeders should consider which trait is of importance to their breeding programme and the corresponding percentage assigned to this trait.

The Reliability figure gives an indication as to how confident that an index or trait figure

will not change in the future as more data is recorded.

Further information on the Eurostars can be found on

https://issuu.com/herdplus/docs/euro-star_system_explained

<https://www.icbf.com/wp/?p=12929>

Information to breeders on Genetic Evaluations is available through

Irish Blonde society On-line Herd-book

https://webapp.icbf.com/v2/herdbook/index.php?source_org=BA

ICBF Animal Search <https://webapp.icbf.com/v2/app/bull-search/>

AI Bull Listing https://www.icbf.com/wp/?page_id=206

Herdplus Reports (where relevant) <https://www.icbf.com/wp/wpcontent/uploads/2018/05/ICBF-Beef-User-Guide.pdf>

Zootechnical Certificates

Breed Society Sale Catalogue

Participating Mart Boards

12) Technical activities outsourced:

The technical activities of the Irish Blonde Cattle Society are outsourced to the Irish Cattle Breeding Federation (ICBF). ICBF provide

- the Taurus data base which contains all data relevant to the Irish Blonde D'Aquitaine Cattle Society breeding book.
- all genetic evaluations for the Irish Blonde Cattle Society.
- training for Irish Blonde Cattle Society staff in matters relevant to the Irish Blonde Cattle Society data base

13) Derogation Article 31 (1)

A derogation was sought and granted by the competent authority to permit a semen collection or storage centre, or an embryo collection or production team to issue a Zootechnical certificate for germinal products based on the information the society has provided. The following being a list of the approved centres/teams:

Dovea AI, Bova AI, NCBC, Coney Island Genetics, Munster AI Farm Services, Eurogene AI,

Slogo AI, Dunmasc Genetics, XYZ Genetics, Celtic Sires, Bull Bank, Kevin 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.

14) **Zootechnical certificate:**

- The Zootechnical certificate provides information on the owner and breeder of an animal. In the context of Zootechnical certificates, the breeder is the member of the Society when entering the animal in the breeding book. The owner is the paid-up member of the Society.
- The Zootechnical certificate is issued to a breeder for an animal when it fulfils the rules of the breeding programme.
- Results of relevant genomic tests, performance testing and/or genetic evaluations are published on the Zootechnical certificate.
- 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 procedure for the change of ownership is that the new owner receives the Zootechnical certificate when taking ownership of a purebred animal and submits it to the Society office. Where if everything is in order the Zootechnical certificate will be reissued to the new owner with the name of the new owner displayed on the Zootechnical certificate.
- All efforts are made to issue Zootechnical certificates within one month of the start of the process except in the event of exceptional circumstances.

Appendix 1

Schedule of Registration Fees

Birth Notifications

Bulls and Heifers €55 (DD €45)

FOT Notifications

Embryo Calf Birth Notification € 60

Transfer of Ownership Fees

Female Transfer €25

Male Transfer €0

Import fee €50