



Jersey

## DRAFT EUROPEAN COMMUNITIES LEGISLATION (IMPLEMENTATION) (BOVINE SEMEN) (JERSEY) REGULATIONS 200-

### REPORT

#### Introduction

In April 2007 the Chief Minister received a joint request from the RJA&HS council and the JMMB requesting the removal of the current prohibition on the importation of cattle semen in the Artificial Insemination of Domestic Animals (Jersey) Law 1952 (the "**1952 Law**").

This would be achieved by implementing in Jersey European Council Directive 88/407/EEC of 14th June 1988 laying down the animal health requirements applicable to intra-Community trade and imports of semen of domestic animals of the bovine species, as amended (OJ L 194, 22.7.1988, p.10) ("**Directive 88/407**"). Save to the extent that Article 30 of the Treaty establishing the European Community applies, Directive 88/407 is applicable to Jersey pursuant to Protocol 3 of the Act concerning the Conditions of Accession of the Kingdom of Denmark, Ireland and the United Kingdom of Great Britain and Northern Ireland to the European Economic Community and to the European Atomic Energy Community and the Adjustments to the Treaties (OJ 1927 L 73) and European Council Regulation (EEC) No. 706/73 of 12th March 1973 concerning the Community arrangements applicable to the Channel Islands and the Isle of Man for trade in agricultural products.

Directive 88/407 will be implemented by the proposed European Communities Legislation (Implementation) (Bovine Semen) (Jersey) Regulations 200- (the "**Regulations**") and the future Artificial Insemination of Domestic Animals (Bovine Semen) (Jersey) Order 200- and the Artificial Insemination of Animals (Jersey) Order 200- (the "**Orders**").

Although the Orders are not subject to amendment by the States and will not be made unless the Regulations are approved, they form an essential element of the overall package as they provide the control framework within which the import, export, disease testing, storage and use of cattle semen will be regulated. For this reason they are appended to this report for information. The Orders will be made to come into force on the same date as the Regulations come into effect. The future Artificial Insemination of Domestic Animals (Bovine Semen) (Jersey) Order 200- regulates the collection, use, importation and exportation of bovine semen and the future Artificial Insemination of Animals (Jersey) Order 200- allows the Minister to control by a system of licensing those people involved in carrying out artificial insemination of cattle.

The request from the industry followed a positive vote by registered milk producers at a meeting held to discuss the issues surrounding semen imports, organised by the RJA&HS. When the above meeting was held there were 33 registered dairy farmers in Jersey supplying milk to the JMMB, of which 26 voted in the RJA&HS ballot. All registered milk producers were given the opportunity to participate in the ballot.

The ballot gave a very clear result in favour of importing semen, with 79% of those registered milk producers participating casting their vote in favour of the proposition (representing 62% of the total dairy farmers). Those farmers voting in favour managed between them 2,632 milking cows (75%) out of an Island total of 3,490 milking cows. In addition one registered milk producer managing a large dairy herd of 275 milking cows, not attending or voting at the RJA&HS meeting, wrote directly to the Chief Minister to signify his agreement to the importation of semen. The RJA&HS checked with producers again in February 2008, as 4 producers had by then left the industry, and the result was the same with 60% of dairy farmers voting for importation of semen and they are responsible for managing approximately 75% of the Island herd.

Registered milk producers are those currently running commercial dairy farming businesses in Jersey and

therefore have a vested interest in a sustainable future for the industry. The above ballot has demonstrated it is their majority view that semen importation is crucial to the future efficiency of their farms and the future sustainability of the industry as a whole. Their request is endorsed by the Council of the RJA&HS and the Jersey Milk Marketing Board and has been given favourable consideration in the recent reviews undertaken by dairy consultants Promar International and Dr. Maurice Bichard OBE, PhD, FIBiol of the University of Reading. The Scrutiny Sub-Panel Report "Review of the Dairy Industry" states "One of the most divisive issues for the dairy producers is the question of the importation of genetic material. It is not disputed, however, that the cumulative financial benefits of using imported genetics begin to outweigh the costs after approximately seven years".

The following report therefore sets out the issues surrounding the importation of bovine semen and argues in favour of adopting the provisions contained in the proposed Regulations which would remove the current ban on the importation of cattle semen and together with the related Order put in place the animal health requirements applicable to intra-Community trade in bovine semen as set out in Directive 88/407.

#### **Scientific evidence in favour of semen importation**

Due to the reduced number of animals after the restructuring of the Dairy industry in 2002, the RJA&HS commissioned in July 2003 Dr. Maurice Bichard OBE, PhD, FIBiol of the University of Reading, who is a highly respected animal geneticist, to carry out a review of the Island dairy herd ("Sustainable Development of the Island's Dairy Cattle") and to make recommendations as to the future management and development of the herd, on a sustainable basis.

The report shows the Island herd is some 15% to 20% behind the genetics of Jersey herds internationally in terms of average milk yields. It also demonstrates that genetic progress from 1988 to 2007 has been slow (0.6% per annum) principally because of the small cattle population and lack of uptake by producers. In addition it also highlighted the effect of the dairy industry restructuring in 2002 which reduced the population (from 4,500 cows to 3,300) to a level where even genetic maintenance, because of inbreeding, may not be achievable in the medium to long term.

Dr. Bichard concluded that "*it would be of benefit to Island farmers and their customers, if importation of Jersey breed semen were permitted*". Since that time continuing changes in the marketplace for milk has resulted in a further reduction in the Island herd which now stands at some 3,000 breeding cows. The RJA&HS Council has stated that they believe that this renders the Island herd unsustainable as a closed population in the context of the accepted minimum threshold of 5,000 breeding females.

The RJA&HS have calculated that Island cows are over 15% less productive than the UK Jersey population in milk production efficiency and even further behind those of international Jersey populations. The use of international genetics would also be used to improve other traits of economic and welfare importance to Jersey dairy farmers, including longevity, butterfat and protein %, concentrate feed usage and susceptibility to mastitis infection.

#### **Economic Advantages of importing bovine semen**

##### *Milking herd efficiency*

A financial analysis of importing semen by the States livestock advisor (endorsed by Promar-International) clearly shows that over a 10 year period significant gains can be made in milk yields per cow, as well as savings in feed use per litre of milk produced. Based on an average 120 cow herd, the extra profitability generated over 10 years of exclusively using genetically superior bull semen would amount to approx £74,000. From year 10 onwards, the annual increase in profitability equates to approx £200 per cow or 3.9 pence per litre. It also demonstrates that for the first 3 years there is no increase in milk yield coupled with higher costs being incurred and it takes 6 to 7 years for extra profit from improved genetics to be generated, thereafter the advantages can add up to over £20,000 per annum on an average 120 cow herd. The reason that using imported semen is so advantageous is that an individual dairy business can either continue to grow milk output without increasing cow numbers and fixed costs involved in production (such as housing, labour, rent and machinery, etc.), or reduce cow numbers while producing the same amount of milk and thereby reducing its costs. Fixed costs are currently very high in Jersey, they are notoriously difficult to reduce and are one of the main reasons for low profitability in most of the Island herds, as shown by the Dairy Industry Costings Scheme.

##### *Export trade in pedigree cattle*

In addition to milking herd efficiency, the importation of bovine semen will reinvigorate the export trade for pedigree Jersey Island cattle and could potentially in the medium result in the resumption of semen exports.

Historically the trade in Jersey cattle was a mainstay of the farming industry in the Island, but currently this trade is virtually non-existent. The main reason for the decline is the lack of genetic progress in the island breed over the last 20 years. The RJA&HS regularly receive inquiries for livestock which cannot be filled because potential customers want breeding stock with modern genetics, and do not value the production inefficiencies of the current Island's herd. Jersey has some of the best breeders of Jersey cattle in the world and it could be argued they are undertaking this task with one hand tied behind their backs owing to the prohibition on the importation of world class genetics into Jersey.

#### **Current EU arrangements for the trade in bovine semen**

Subject to satisfactory safeguards for disease control there is a presumption of the free movement of agricultural goods and products in intra-Community trade. Although restrictions on trade, such as exist under the 1952 Law, to prohibit the importation of cattle semen into Jersey, may be the subject of criticism and legal argument as to their validity, there are arguments that can be applied to resist such claims. It is unnecessary in this Report to go into such areas, but sufficient to advise members that if there is a difficulty at present, then in so far as that difficulty relates to cattle semen, the proposed Regulations remove this difficulty. There are other aspects of the 1952 Law which may need to be returned to on a similar basis at a later date.

The proposed Regulations will, together with the Orders, implement in Jersey Directive 88/407, as amended, laying down the animal health requirements applicable to intra Community trade in and imports of semen of domestic animals of the bovine species.

Imports of bovine semen from outside the EU would have to come via a EC semen storage centre and will be subject to the same conditions and certification as intra community traded semen. Therefore the provisions of Directive 88/407 relating to imports from outside the EU have to be met, for example the semen has come from countries and semen centres approved under Directive 88/407.

Notification of movement and certification would be through TRACES. TRACES is an internet-based system for the creation of health certificates and notification of the movement of products/animals between Member States. It allows the creation of a health certificate by central authorities for animals or their products to be exported to another member state. It is used to inform the authorities in the region of destination of the movement and to record animal movement in case of a notifiable disease. It is also a tool for monitoring animal welfare. It is also used for movement notification between the Channel Islands, IOM and UK Mainland and UK Northern Ireland.

Imports of bovine semen to Jersey from other places in the British Islands (internal movements for which intra-Community trade certification cannot be used) would be controlled by an export health certificate (EHC) agreed with DEFRA, for the UK. We have such agreements for pig, sheep and goat semen and the States Veterinary Officer would agree similar arrangements for the import of bovine semen.

#### *Disease controls*

Directive 88/407 ensures that bovine semen traded in the EU, and the animals from which it was collected, have been certified free of the relevant diseases, including:

- Foot and Mouth disease
- Rabies
- Tuberculosis
- Brucellosis
- Anthrax
- Blue Tongue
- Bovine Viral Diarrhoea
- Enzootic Bovine Leucosis.

The above is not an exhaustive list but is included in this document to indicate the professional way semen trading is undertaken throughout the EU. This comprehensive disease testing regime together with 30 day quarantine of semen following collection, and the operation of EU trade regulations means there is a negligible risk of bovine disease being transferred via semen imports. The future Artificial Insemination of Domestic Animals (Bovine Semen) (Jersey) Order 200- gives full effect to Directive 88/407 in Jersey by establishing a control regime for the collection, storage, disease testing and use of semen, both within the Island and for semen that is either imported or exported.

### **Safeguards to the pedigree of the Jersey Island cow**

Since its foundation in 1833 the RJA&HS has been dedicated to the improvement of the Jersey cow. The export trade in Jersey cattle was already well established when the society was founded, and flourished over the next 100 years with many of the finest animals bred in the Island being exported at very high prices. The Jersey Herd Book was started in 1866 with other national societies following and all having adopted the same principles of pedigree registration. Other important milestones were animal identification and the classification and linear profile for each animal. Today there are over one million pedigree Jersey's registered with national societies all affiliated to the World Jersey Cattle Bureau. Jersey holds less than 1/10th of 1% of the world's pedigree Jersey cattle population however Jersey is the home of the breed from which all pedigree Jersey cattle around the world can trace their ancestry.

#### *Pedigree safeguards*

To safeguard the pedigree of the Island breed the RJA&HS Council have resolved to only register the offspring of bulls with a pedigree that shows that all its forebears have a pure Jersey pedigree for at least 7 generations. This safeguard will ensure only semen from bulls with a pure Jersey ancestry will have offspring included in the Jersey Island pedigree register. The inclusion of pure Jersey bloodlines, from the international pedigree registered herd book, will not alter the size, colour or beauty of Jersey Island cattle to the casual observer. The general public or visitors to the Island will continue to see the same Jersey cow in her island home.

#### *DNA testing*

DNA testing is routinely undertaken to check the parentage of bulls selected for semen collection. DNA testing is carried out when Jersey bulls are selected for semen collection in USA, Canada, Denmark, Australia and New Zealand and these are the most likely sources of improved genetics. DNA testing is used to positively establish the sire and dam of any bull within a 99.999% accuracy, a negative test is 100% accurate.

The RJA&HS has resolved to DNA test semen from each imported bull on consignment when the straws arrive at their AI centre thereby eliminating the possibility of a mistake involving animal identity or the inclusion of another breed. In addition the RJA&HS already undertakes DNA testing to establish the parentage of Island bulls prior to their inclusion in the Island Herd Book this practice will continue post semen imports again insuring the purity of the breed. Wetherby's, a highly respected livestock company with a worldwide reputation, have been approached to undertake DNA testing on behalf of the RJA&HS to safeguard the purity of any future semen imports. As a final safeguard, the legislation allows for the destruction of any progeny of any semen which it is found after the event did not satisfy the import conditions.

#### *Use of imported semen is optional*

The use of imported bovine semen will not be compulsory, and those farmers who wish to continue breeding their cows to traditional bloodlines will be able to make that choice. To ensure choice is available, the RJA&HS intend to continue with the collection of semen from Island-bred bulls and offer their semen for use to dairy farmers. In addition, the RJA&HS has maintained a bank of semen from every bull that has been collected over the last 20 years and this is available to dairy farmers wishing to breed traditionally.

#### *Importation of non-Jersey Semen*

The fact that semen imports could not legally be limited on genetic grounds to only pure Jersey semen was made clear to registered milk producers prior to the ballot being undertaken. However, the niche opportunity exists to improve the efficiency and volume of beef production in Jersey by the use of semen from selected beef breeds. There is currently some interest in local meat production, including beef; however a pure bred Jersey steer lacks the growth rate, feed efficiency and carcass quality of breeds specifically designed for beef production. The ability to import semen from selected beef breeds could help the economics of beef production in the Island, satisfy the growing trade in local meat, improve the throughput of the upgraded abattoir and reduce the number of unwanted calves born in Jersey.

Therefore it is possible that some beef breed semen may be used in a limited way. As explained in the previous sections, the pedigree status of the Jersey herd will be protected, and indeed as all cattle in the Island are recorded by the Society, as demanded by legislation, then there is full traceability. In Guernsey some 70 beef animals are raised each year for the local beef market, and the integrity of the pedigree Guernsey herd is not affected by this. In Guernsey, where imported semen has been used for decades, niche beef production has been seen as a means of complimenting the income of dairy units without jeopardising the existence of the local breed.

### *Other dairy breeds*

The JMMB Rules of Supply, which are obligatory for registered dairy farmers supplying milk to the Five Oaks dairy, states that only milk from recorded pure Jersey cows will be collected for processing. This JMMB rule removes the incentive for dairy farmers to use non-Jersey dairy bulls. It is understood that the JMMB or any successor company would continue with the above rule, ensuring milk supplied to its customers will continue to be of pure Jersey origin. The industry representatives are clear that there are many logistical and practical reasons which would stop other dairy breeds appearing in Jersey. As described, the RJA&HS will only deal in pedigree traceable Jersey semen, and through the Herd Book rules, the pedigree status of the Islands herd will be protected.

In Guernsey, dairy farmers have been at the forefront of a Guernsey breed worldwide improvement program for the last 30 years following allowance of the importation of semen. International pedigree Guernsey bull semen has been used widely to improve the genetics of the Island strain. Milk yields and other traits in Guernsey have improved in line with the world population and because of the skill of the local breeders have an international reputation as a centre of breed excellence. The import of bovine semen into Guernsey has not resulted in the loss of the breed but has contributed to the strength of the breed in its Island home without jeopardising that Island's controls on imported liquid milk. The only milk-producing cattle in the Island are Guernseys and, as in Jersey, the local milk market is supplied by the local herd.

### **Impact on the controls on liquid milk imports**

The importation of liquid milk in to Jersey is only allowed by licence under the provisions of the Import and Export (Control) Jersey Law 1946, as amended. There is no intention to relax the current policy of not licensing milk imports unless local supply does not meet local demand or that policy is subjected to a successful legal challenge.

This import control strategy was challenged in 2001 by a referral to the European Commission and the Island was invited to present its comments on the legality of that strategy under EU law, which it did. It was argued that due to the small market size, the viability of the Island's herd and the maintenance of the gene pool the controls needed to be maintained. It was argued that the aim of protecting the health and status of this unique, iconic and historically valuable Jersey herd was compatible with Community law and was justified and proportionate. It was also justified under the 1992 Convention on Biodiversity.

Although the EU did not formally reply, the Island authorities were advised by the UK Permanent Representative to the EU (UKREP) that the item was no longer on the European Commission's list for further action, and that it had decided to take no further action on the complaint. Therefore, although there is no formal EU derogation supporting our laws controlling the importation of liquid milk, the present position is that the European Commission, having been notified of the existence of the import controls and an objection asserted against them, does not consider that they should be challenged.

There is currently a presumption by some that due to the case being based partly on a closed-herd argument that if importation of semen was allowed this would weaken the case. While it is a reasonable assumption that the closed herd argument was helpful in persuading the Commission to take no further action and that while future strategy should be made as compatible with this case as possible, there have been fundamental changes in the industry since the case was originally presented.

Since then the herd size has reduced by about 30% and is now about 3,100 milking cows, this is below the 4,000 to 5,000 that it was argued in the case as the minimum needed to allow for increased production efficiency and maintain the genetic integrity of the Island breed. Analysis of the factors affecting profitability of the industry, as shown by the Dairy Industry Costing Scheme, demonstrates that while the Dairy relocation will help increase profitability in the short term, the next step to improved profitability will come from higher productivity and increased efficiency at farm level. The JMMB have also stated that unless genetics are imported, they cannot achieve their aim of providing their consumers with milk at value-for-money prices which they believe will also negate challenges against the strict imposition of milk importation controls.

The industry maintains that the greatest threat to the importation of milk will be NOT to allow import of genetics, as leading producers are clear that they will not carry on in production without imported semen. This would probably lead ultimately to an under-supply of liquid milk, and milk will have to be imported to make good the shortfall.

### **Summary and conclusion**

The majority of producers argue that this change is necessary for the future of the industry, and fundamentally the

pedigree status of the Jersey herd will be protected, it will not be compromised. It has been voted for by a majority of producers twice in the last 12 months.

Using imported pedigree Jersey semen will not change the look of the Jersey cow. The RJA&HS have stated categorically that to the layman the Jersey cattle in Jersey fields will look exactly as they do now. There is also no compulsion to use imported genetics and those that want to use semen collected in Jersey previously can do so or use semen from their own bulls.

Milk importation is not necessarily more likely with the adoption of this legislation; in fact the leading producers state that the failure to adopt it will trigger a decline in the industry that will ultimately lead to the importation of milk and loss of the historic herd.

It is sometimes argued by those against this change that Jersey has too much milk already and this would just make it worse. This is not the case, the recently reduced supply to Jersey Dairy is now just sufficient to guarantee an all year round supply of milk for the local liquid milk market and the profitable added value product lines. The use of genetics helps the efficiency of the herd; this can mean getting the same amount of milk for less costs (e.g. less feed, less cows). By making the herds more efficient and future expansion of production to meet market demand for value added products will be delivered from a lower cost base.

While there is the potential for non-Jersey type cattle in the Island, there is evidence as discussed that, as in Guernsey, there will be a niche amount if any. Their presence will not affect the pedigree status of the Island Jerseys.

*NO*  
The RJA&HS are confident that they can restore Jersey's place in the world Jersey community, this will create an export opportunity for semen and stock (currently Jersey semen has almost zero value outside the island). Importing semen is not just about milk yield or efficiency of production but also gives benefits such as animal longevity and other health benefits. Due to the legislative controls proposed in future Orders there is negligible health risk.

It must be remembered that this request comes from the majority of dairy producers, it is a fundamental part of the JMMB's recovery plan and it will have benefits to farmers, their cattle and consumers.

#### **Financial/manpower implications**

There are no direct financial or manpower implications arising from these Regulations.

*→ difficulty in having multiple fixed fees in sample*