

STATES OF JERSEY

Corporate Services Scrutiny Panel Proposed Importation of Bovine Semen

MONDAY, 16th JUNE 2008

Panel:

Deputy P.J.D. Ryan of St. Helier (Chairman)

Deputy J.A. Martin of St. Helier

Connétable G.F. Butcher of St. John

Connétable P.F.M. Hanning of St. Saviour

Professor S. Hall

Ms. S. Power (Scrutiny Officer)

Witnesses:

Mr. N. Blampied

Deputy P.J.D. Ryan of St. Helier (Chairman):

Mr. Blampied. Thank you very much for joining us and sparing time for the session. Because we are recording and it helps the transcript if we could just ask you to introduce yourself so that your voice can be recognised on the tape, if you would not mind, and then I will quickly introduce you around. We are one short.

Mr. N. Blampied:

My name is Nicholas Le Quesne Blampied. I am a retired veterinary surgeon. I was in practice in the 1950s, 1960s and 1970s and, at one time, I was States Veterinary Surgeon for a period and I deputised for T Le Q Blampied for about 20 years as well.

Deputy P.J.D. Ryan:

Thank you very much. On our side there is Deputy Judy Martin, Sam Power, Constable Peter Hanning of St. Saviour, myself, Deputy Patrick Ryan, our adviser Professor Stephen Hall and Constable Graeme Butcher from St. John. So you have submitted a paper, Mr. Blampied, on various things. Can I go straight into the background of the absence of bovine leukaemia in Jersey. You wrote a paper on it in 1967.

Mr. N. Blampied:

That is right.

Deputy P.J.D. Ryan:

Do you know of any occurrences since then?

Mr. N. Blampied:

I have no knowledge. I have not seen or diagnosed viral bovine leukaemia, nor have I heard of anyone else that has diagnosed it either in the Island. The original, as you read, was a project that we took and sent these 500 samples to California and got a negative response to bovine leukaemia whereas when the Jersey went over to America, some of them developed bovine leukaemia. So the indication then was that it was a virus. In those days, they did not know it was a virus and in a similar way in the human medicine in the last 30 years, cervical cancer in women had been diagnosed as a virus but I take it 30 years ago, they did not know it was a virus and this is one of the arguments of importing semen is that you might import an unknown virus, maybe a cancerous virus or such which is at the moment unrecorded. That is the policy, that is the whole thing of that.

Deputy P.J.D. Ryan:

Okay, what do you think about the Island Jersey cow at the moment in terms of its resistance to diseases generally?

Mr. N. Blampied:

We have no knowledge at the moment. We only have supposition that the Jersey might have a resistance to a forgotten or unknown disease but it is only a supposition that we might have. There is no substantial evidence if we have any resistance at the moment but it is a possibility. As it is quoted in the plant world, if you could have a comparison, they went down the line of perpetuating a particular species and it collapsed because it was not resistant to the local viruses. So there is always that possibility.

Deputy P.J.D. Ryan:

Okay, have you had experience with Jersey cows that have been exported to the mainland U.K. and we have heard from Mrs. Vint about her experiences. Can you ...

Mr. N. Blampied:

You mentioned shipping fever.

Deputy P.J.D. Ryan:

Well, I think that that particular herd that they took to the United Kingdom went on to a farm that was not very clean and they had quite a hard time with various different diseases. Do you have any similar sorts of experiences?

Mr. N. Blampied:

What I have experienced from people who have exported is that they succumb to a parasitic bronchitis, which is common in England, called husk, and that is quite debilitating. In Jersey up until recently, we have never had husk but there is always a possibility. At one time, the States Veterinary Surgeon prevented sheep coming into the Island partly because parasites might come in which might jump to the bovine with a risk of something like husk coming in. So I do not know whether we have any parasitic bronchitis at the moment but up until a few years ago, there was none, whereas if they went over to England, they certainly went down with parasitic bronchitis. Other diseases which we have never had which would be Actinobacillosis and Actinomycosis which, is commonly known as Wooden Tongue or Lumpy Jaw which they get an infection there, we have never had this in Jersey. They will succumb to that in parts of England. Certain Chlostridia infections, especially in the West Country and Hereford area, where some of the Chlostridia are very common called Blackleg and Black Quarter, they develop these toxins from the Chlostridia which we do not see in Jersey. I do not say that it is not possible but we do not see the disease. So there are quite a few diseases which Jerseys going over to the mainland will be confronted with.

Deputy P.J.D. Ryan:

Now, what about those diseases coming in the other direction?

Mr. N. Blampied:

They would not come in through semen or ovum or embryo except, in my opinion, unknown viruses which I have explained but those other diseases would not be imported by the introduction of embryos.

Deputy P.J.D. Ryan:

So your expert evidence would be that when we hear that it is very unlikely to come in through the importation of semen, you would concur with that opinion?

Mr. N. Blampied:

Any of those diseases that I mentioned, yes, except for unknown viruses which other parts of the world may be resistant to and we would have no resistance to but those are the only dangers from that point of view. The leukaemia virus - it is also known as Leucosis - our States department asked for a test against it so they do test against that, particularly leukaemia coming in.

Deputy P.J.D. Ryan:

And is there no way of ensuring that even that last risk -- I am assuming that that risk of unknown viruses is a fairly slim one.

Mr. N. Blampied:

It is a slim one.

Deputy P.J.D. Ryan:

But is there any way of eliminating it?

Mr. N. Blampied:

No, not that I am aware of.

Deputy P.J.D. Ryan:

What would happen in the nightmare scenario, I suppose.

Mr. N. Blampied:

It looks as though if you go down to the thoughts that you might have some form of maybe infertility, maybe certain cancers, something of that nature but unknown at the moment, I can only visualise what it might do.

Deputy P.J.D. Ryan:

Okay.

Mr. N. Blampied:

The other thing which I would like to mention which can come in is genetic characters which we do not have in Jersey. When I was in America in 1950, there was a bull in the A.I. (Artificial Insemination) Centre in Toronto and he was being widely used in New York State and that had a genetic defect, a recessive one, which was causing complete blindness in cattle. In fact, you could abort these animals at 5 months and diagnose this complete blindness. So rather than a virus coming in, you could have a recessive gene coming in which will only come up if the 2 recessive genes come together. So for the first generations, if the semen does not submit to a cow with that recessive gene, you will not know it is there. That is a possibility and that record could be substantiated. The survey of that was done from Cornell University in New York State.

Deputy P.J.D. Ryan:

So moving on to production diseases. Do we have, in your opinion, differences in the Jerseys that we have here as compared to the dairy herds in other parts of the world? Do we have something here that is special or not, as the case may be?

Mr. N. Blampied:

Genetically, we have an excellent record of genes in Jersey. We can produce an individual cow that will give 10,000 litres of milk so the genes are potentially there. Herd averages vary tremendously. If the

same number of bulls will be used, you will get herds in Jersey, I understand, that can give over 6,000 litres average and yet using the same type of genetics, there are herds most probably only giving about 4,000 litres. So basically a lot of it is efficiency in management that can produce a good herd. I think in Guernsey, I understand and I have not checked it, the top herd in Guernsey produces a tremendous amount of milk where some of the other herds using the same imported bulls for 30 years produce a very much lower herd average so herd efficiency in management is a great deal of the problem.

Professor S. Hall:

What about production diseases, things like mastitis? Is the Island population different, would you say, from Jersey populations elsewhere?

Mr. N. Blampied:

Yes, the one disease which, as far as I am concerned, we do not get a lot of is *Corynebacterium pyogenes* and that on the mainland is fairly common and I think we are resistant to it -- it is diagnosed in Jersey, it is a devastating mastitis for that particular quarter. Invariably, the quarter will go black and it will slough off and that is very common in parts of England so, yes, from that point of view, we do not have that particular organism frequently.

Professor S. Hall:

Is there a challenge from that organism here, do you think? Is it absent as a challenge or is it possible that there is a resistance?

Mr. N. Blampied:

I do not know.

Professor S. Hall:

You cannot tell?

Mr. N. Blampied:

I cannot tell, no.

Professor S. Hall:

You mentioned genetic defects. Are there any well-established genetic defects in the Island herd?

Mr. N. Blampied:

As far as I can gather, certainly there are certain defects in the jaw where you get an undershot jaw where the jaw does not meet and, in the same way, you can get an overshot jaw. Now, this is not a great problem if you have pasture fairly high and the animal can cope. Where it would be a major problem is

if you were dealing with very short scrubland and the cattle were struggling for feed and they might not be able to do it so that is one of the characters we have over here. In the same way, we have the one which they have tried to breed out in certain places of a twisted nose where the nose comes down. You also get a twisted tail where there is a notch in the tail, not very serious, but it is impossible to straighten those tails. They have tried to and if you put it in plaster, the tail will drop off. Other defects or other characters would be posture, feet, attachment for the udder, but those, as far as I can gather, in Jersey, have been pretty well controlled over the years and you get some animals that have a stronger attachment to the udder than you get in others but -- and obviously good feet.

Professor S. Hall:

Another feature of Jerseys which I have heard suggested is that the very attractive face of the Jersey cow, the dished face, is a product of selection which we so often see in things like dogs for a rather baby-like appearance and the Jersey is very unusual in this respect and part of the appeal of the breed, I think. But do you get dental row defects, the row of molars and pre-molars, do you get missing teeth or ...

Mr. N. Blampied:

Not to my knowledge.

Professor S. Hall:

No, okay. So the general picture we have is then the Island Jersey breed is pretty free of a lot of diseases that would have genetic connection and I suppose the thing to go on from that is are you able to comment on whether that is the same with Jerseys overseas? Are Jerseys in other countries similarly free of these conditions?

Mr. N. Blampied:

That I cannot say at the moment because the thing about the Jerseys overseas -- I do not know when the herd books in each country have been established but when we were exporting in early 1900 and the 1920s to Denmark, for instance, they suddenly came up with a Jersey with a very high butterfat, much higher than we had, and it was always thought in those days that they had crossed it with a Danish Red but it was never proved because you could not prove it. And very quickly they are back to 95 per cent pure and I am sure that in New Zealand, speaking to the people at the conference, they say that a pure-bred Jersey as long as it is 12/14ths - I do not why they do not say 6/7ths, but anyway, 6/7ths pure - that they can register it as a pure-bred Jersey and I am sure the herd book in America -- and I do not know when it was first established but it was not established in the early 1920s and therefore the chance of an outcross to a different breed is fairly high. So you are importing foreign breeds. They tell me that the Danish Jersey are liked by the Danes, the New Zealand Jersey is liked by the New Zealanders and the American Jersey is liked by the Americans they do not necessarily like each other's breed particularly.

Deputy J.A. Martin:

Sorry, can I just come in there. I am probably maybe not talking about the same herd book. I was told this morning - I cannot remember which witness it is now but I wrote it down - that our herd book goes back to 1866 and then we could trace back imported semen through different herd books that would probably be established around the same time because it was going -- you are saying no.

Mr. N. Blampied:

I am saying no.

Deputy J.A. Martin:

You are saying that they are not ...

Mr. N. Blampied:

I would have to check that but I do not believe the individual countries established herd books anything like that time at all.

Deputy J.A. Martin:

Right, so if they did not do that and your other -- you said 12/14ths or 6/7ths, we also heard this morning that we would only be importing if it was allowed back by a 7 to 8 generations proven registration in the herd book.

Mr. N. Blampied:

Right, okay.

Deputy J.A. Martin:

Would that then outbreed this 1/8th of crossbred animal as known as a pure Jersey? I think we have been told that if we go back registration for 8 generations, even if 8 generations ago there may have been a slip-in of some other breed, we would be assured that all that time on and that is -- we are going extra than most of the other Jerseys around the world that we would be protecting as pure a Jersey as it gets.

Mr. N. Blampied:

Yes, you are still allowing to be registered in other parts of the world anything that is 7/8ths pure so they can outcross it and then bring it up to 7/8ths and that can be registered as a pure Jersey in their herd book.

Deputy J.A. Martin:

Can be registered but I will check this after, it may be registered, but I am told that once that is

registered, we would not use the semen from the offspring for 7 to 8 generations down once it is registered. I may be misunderstanding that but then to me would be well-proven Jersey.

Mr. N. Blampied:

Now, that is fine, but once you open the law, anyone can be able to import semen from whichever bull they like. The herd book might stipulate that but it does not mean to say that an individual farmer will not bring in a bull which is not 100 per cent Jersey. So once you open the floodgates, you cannot control it.

Deputy J.A. Martin:

I totally understand what you are saying. We are told from other sources that the control will be if somebody did do that, their milk would not be taken, that it would not be processed in Jersey because it is not pure so although you say anyone could bring it in, I would ask the question of you why would anybody want to bring it in?

Mr. N. Blampied:

Well, I just know that there is a certain person, Darren Quenault, that has his own dairy, okay. He might say: "Right, well, I can do it." I do not think he would but I am just saying that, in the future, you cannot guarantee once you open that law -- once you break that law.

Deputy J.A. Martin:

Okay, thank you. I need to check a few -- obviously I need to listen back to --

Mr. N. Blampied:

You have to check a few of the herd books.

Deputy J.A. Martin:

The herd books and the laws that underpin this as you say. The other question was -- well, it was on your submission. It is basically if 50 per cent of the Island cattle were allowed to breed to imported semen, we will narrow the genetic base and be related to the most popular bull.

Mr. N. Blampied:

That is right. Say, for instance, there are some very excellent genetics in American bulls and therefore if 50 per cent of the herd decided to breed to that bull, you would have 50 per cent of your first generation related to that one animal and also it would be a similar relationship to the vastly used in America which they say it is, you will be 50 per cent related to all the other first-generation cows in America so they would all be of similar genetic base.

The Connétable of St. Saviour:

Can I just follow up on that. If they have been doing some bull proving in Jersey, and some of the local bulls have a record of being better than others, is there any reason why this should not already have happened in Jersey where this is a much smaller base of the number of bulls?

Mr. N. Blampied:

According to the Bichard Report - that was, I think, about 2003 - he said that there had only been random breeding in Jersey for the last 70 years and that we were using 126 bulls. So at the time and going back another 20 or 30 years before A.I. even started, I think there was most probably over 200 bulls being kept at service. So at the time, no, there has been no Jersey bull that has been excessively used in the Island.

The Connétable of St. Saviour:

Do you not think that if there was no semen introduced, there would be pressure on Jersey farmers to try and improve their breed and they would therefore do the same thing?

Mr. N. Blampied:

You would get that to start with but you then have a pool, I understand, of semen and I have heard a figure quoted of the semen of about 100 bulls in storage, so you have a wide genetic base available.

Professor S. Hall:

Well, I was simply waiting for an example which perhaps would help with Deputy Martin's questions. You import semen, you inseminate your best cow, you get a bull calf. You think: "Gosh, I might have the next champion bull here" so you keep him there. You might mate him back to his mum who is a very good cow. Instantly, you have inbreeding. I think that is the sort of situation you are envisaging. I think that what you are getting at is that if a bull is used extensively, then almost inevitably, his progeny are going to be mated with his other progeny. That is standard, that just happens with livestock.

Mr. N. Blampied:

Yes.

Professor S. Hall:

With any elite animal inevitably fairly soon is going to come around and meet up again and that is the definition of inbreeding.

Deputy P.J.D. Ryan:

One of the things in your submission is that you say that we will lose many of the genetic features of the original pure Jersey Island cow. Could you expand on that for us.

Mr. N. Blampied:

All I can say is what I am saying. If 50 per cent of your first generation is from a foreign semen, and I take it one of the ones will be from the American high breed bulls. Now, that animal has lost 50 per cent of its original genetics. It has got the genetics of this American bull, I take it, say an American bull, and so if you breed again, maybe not to the same American bull but to another American bull, you are down to only having 25 per cent of your local genetics. So the more you breed your progeny to foreign bulls, you lessen your local genetics. Correct?

Professor S. Hall:

Yes, I think the contention against that would be that that American bull can trace his pedigree back to Jersey, you see, so perhaps you must have thought of this so have you got a counter of that particular assertion.

Mr. N. Blampied:

Yes, it is a possibility.

Professor S. Hall:

Yes, okay.

Deputy P.J.D. Ryan:

Unless there is anything that we have missed that you would like to add ...

Mr. N. Blampied:

No, the only other thing -- in the *Promar Report*, he states really that the major issue is sorting out the dairy and importing semen, secondly the majority of farmers according to the *Promar Report* says it comes down the list but one has to sort out the dairy first of all. Then you have to make the dairy new plant more efficient, less labour, viable profitable exports if possible and if these factors are improved, your cost of producing milk will be vastly reduced, most probably much more than the supposed advantage of importing semen. More efficient milk production is going to be less in Jersey with the excess costs for feeding and land being more expensive. So the advantages which they get in other parts of the world I do not think will be as great in Jersey, but in my opinion, it is the dairy that has to get its house in order and make it more profitable. Also I think you will find in Jersey that there are a lot of herds which do not have the same good milk average and I do not think there are many herds that have had over 6,000 litre average but I think there are many herds in the Island which are not nearly as efficiently run and I think it is the efficiency of the herds which is also a prime factor in making the whole dairy industry profitable.

Deputy P.J.D. Ryan:

Do you still think that that holds true as we get a smaller number of larger herds and a fewer number of smaller herds?

Mr. N. Blampied:

I think that most probably it is more economical to run larger herds, yes. I think it must be. The mind boggles if you think of numbers in New Zealand or America. They are in their thousands and therefore, they can cut costs so it must be that the larger herd is more efficient.

Deputy P.J.D. Ryan:

The total number of herds that we have now is 29.

Mr. N. Blampied:

When I was in practice, there were over 1,000 herds.

Deputy P.J.D. Ryan:

Yes.

Mr. N. Blampied:

So ...

Deputy P.J.D. Ryan:

It has changed a lot.

Mr. N. Blampied:

Changed a lot.

Deputy P.J.D. Ryan:

Right, well, it just falls on me to say thank you very much for your submission and your time this afternoon. It has been very interesting and we look forward to reflecting some of your views in our report. Thank you very much.

Mr. N. Blampied:

Good, thank you very much indeed.