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## Panel Discussions

### Common Practices, Common Problems

CHAIRMAN: A. FRASER

*Memorial University of Newfoundland, St. Johns*

Dr. Dellmeier was mentioned as being an active colleague of Dr. Friend, I wonder, would you perhaps like to join us on the panel to field some of the questions if any come your way?

*Anon.:* Ted (Dr. Friend), in a country that works off supply and demand in the market place, costs will rise if the consumer wants the goods. Caviar still sells, even with our troubles with Iran, but at a much higher price. Why is there so much emphasis on the economics involved in the rearing, for example, of veal calves, when, in fact, the better methods, which are much more costly, would result in much more costly veal? The market demand might not be as great and therefore the rearing volume less. The price could be appropriate to the cost of rearing the cow and we could get on with an ethical approach to calf-rearing.

*Dr. Friend:* I would agree with you basically that if the people are willing to pay, farmers will gladly raise veal in just about any way, style or color that people want, or so is the traditional statement that we hear. The problem is the way our system works and trying to get changes in this. The farmers that I have talked to would be glad to do just about anything that the market system would require or allow them to do to still make a living and to do what they want to do, or to work with their veal calves.

*Dr. Broom (University of Cambridge):* Could I comment on the last question first? The question about veal. Red veal is cheaper to produce than white veal. So that if there was a changeover away from extensive milk-feeding of calves and a change in methods of rearing to a group-housing system, then in fact the total cost of the veal would not be greater. That is only if you demand that the veal must be white. There is an area here for consumer investigation: do people really require white veal? Is it a matter of what it looks like? Are there any real differences in taste? There is some research here which could readily be done.

Apart from that I agree with what Ted Friend says that if there is a product, if there is something where a more humane rearing system has a cost, if it costs 5 or 10% more, then ultimately the public has to decide whether they are willing to pay that extra 5 or 10%. And all these changes can be brought about without

removing the livelihood of farmers. It is perfectly possible for most of the social changes which each of us have been discussing to be brought about and the farmer can still make exactly the same living that he makes now if the public is willing to pay the small additional cost which improved welfare involves.

*Mr. Spira:* Dr. Broom, when he addressed us this morning, indicated some of the parameters of stress and he indicated a need to assess them and the need to change them. Dr. Friend also related some of the parameters of stress. The question I would like to address is somewhat unorthodox, but it is: what obligation does the industry in the U.S.A. see in funding research on the issue of reducing stress and, particularly, in funding projects where the people running the projects have a commitment towards reducing stress and have indicated the possibilities of this happening?

The reason I am asking the question is because in the U.S.A. the corporations that use animals in testing have put up 5 million dollars to set up centres for alternatives to the use of animals, and have also spent tens of millions in-house because they feel that they have an obligation to do something about the stress that their industry is promoting.

*Chairman:* I am not sure about the admissibility of a question to someone innocently sitting in the audience at this time with a bit of a left hook on the blind side, but it is possible that Dr. Dellmeier could give a comment on that, and if the person who has been addressed in the audience really has an urge to reply then he is free to do so.

*Dr. Dellmeier:* I do not know how I could reply to that. It seems like it might fit in better in a lighter section on science and the politics of the use of animals in food production, perhaps.

*Dr. Broom:* I think this raises a very important issue. What is happening, certainly in Europe, is that there is increasing public pressure for certain sorts of changes in agriculture. You have heard, for example from Dr. van Putten, about the sort of research which is being carried on to try to find a viable alternative to housing sows in crates or in stalls or tethers. This research is being carried on without any kind of contribution from the industry at the moment; or at least in most countries the agriculture industry is not involving itself very much in the research on alternative systems. Now what this means is that if there is a change in legislation brought about by public pressure, the commonly used system is going to be made illegal. That kind of thing is certainly happening in European countries now, and I would think it is just a matter of time before it happens in a lot of other countries, and industry is not going to be prepared for the change. So I feel that what the industry ought to be doing is helping their research workers to find out what are viable alterna-

tive systems to the ones which are presently under considerable criticism, and that it is in their own interest to do so. I am glad that point was raised.

*K. Easton:* My background is both as former employee of the Ontario Humane Society and currently with Agriculture Canada. In my association with Agriculture Canada, I have been mainly involved with the abattoirs in Toronto, and particularly with the slaughter-end of white veal. In that position, I have fielded many questions from the consuming public regarding the raising of white veal. I have done several research papers on the subject. Recently, I answered an article that appeared in an Ontario Humane Society publication which I felt was very, very confusing to the consuming public. When I got the answer back from Mr. Hughes, he suggested I raise it here, and I see right in front of me now the man who, I think, can give the answer.

The arguments I received from the white-veal raisers is that they have better control of each calf at the beginning of the system at 2 weeks. At the end of the system, at 12–16 weeks, the calves are in fact out-growing the stalls, and that is where all of the complaints from the consumer and from the animal rights activists come in. The animals are, in fact, out-growing their stalls.

The solution that I have proposed is to combine the two. At the beginning of the system, crate-raise them so that you can get them all stereotyped. At the end of the system, allow group-housing so that each animal can react and gain what it individually needs.

*Dr. Friend:* That certainly could be a viable solution and such systems are in use in Europe. I do not know of any that are in use in North America at this time. A standard system would be to raise them in crates until they are 3 or 4 weeks old, and then to turn them loose or to open the rear of the crates into a slatted floor area and allow them access then.

We do hear a lot of conflicting reports about the importance or degree of control and the need for crates. If you talk to people who have crates or people who have tried loose-housing and have gone back to crates, they will tell you it is absolutely necessary for this degree of control at the beginning. If you talk to veal raisers who are in loose-housing, they say that this degree of control is not necessary. They think they have adequate control with loose animals and they can watch them. Those are the people who are successful in loose-housing. There are relatively few people that are successful in loose-housing. It takes a different sort of personality, a different sort of philosophy, to run that kind of system and have success with it. Loose-housing with machine feeding does not mean you have more time off. It means you have to spend just as much, if not more, time watching the animals, and it depends on the managers as to what system is going to work well.

There is a lot of conflicting information about standard sizes. If you are in loose-housing you have a standard size and you can control the size of the

animals. A lot of it has to do with the animals that you purchase at the beginning; how standard are they compared to those housed in crates.

So there are pros and cons, and you can argue just about every one of these issues.

*Mr. Easton:* What I was hoping to get from this question was whether, in the near future, you can see veal raisers drawing the best from each of the necessary ways of raising these animals and putting them all together into a system that will be acceptable to both the producer and the consumer?

*Dr. Friend:* Yes, I think we can draw the best and come up with a good system. The biggest problem, though, is that any individual person (human nature being as it is) is going to make an individual system work if they want it to work. We can come up and say this is the way to do it, but if someone does not want to do that, or if they do not have the interest in it, they are just not going to have success, and the animals will be worse off in whatever *we* might decide would be optimum. So *we* can say that this would be the best situation based on behaviour and data, and this is probably what you should try, but some people can make other situations work too. Human nature is really our biggest problem.

*Mr. Jackson (United Kingdom):* Following on from that question, I have a question for the panel which *is* a question, not an observation. Does the socially isolated calf nevertheless need a behaviourally enriched environment? And if so, how would the panel suggest that the environment is behaviourally enriched?

*Dr. Dellmeier:* If I understand your question correctly, you are asking what could we do within the confines of, say, a stall system to enrich that environment?

*Mr. Jackson (United Kingdom):* No, my question was that I think Dr. Friend said that the socially isolated calf does not suffer as much as the philosopher would think. So that if the socially isolated calf does not need the presence of other calves, does it not necessarily need something, the sight of something, some person or other thing, or some behaviourally enriched environment? That's the question.

*Dr. Dellmeier:* I think I can answer that quite easily. I think that is mostly a misunderstanding. The calves in our study were only confined for 6 weeks and they were not completely and totally isolated; they could see other calves. I think what Dr. Friend was trying to point out was that when they were tested in the open-field situation with alien calves, they were even more socially active, and we interpreted that to indicate that they had a drive for social behav-

your. I believe that if we had kept these calves extremely socially isolated for a much longer period of time, then we would have seen abnormal behaviour when they mixed with other calves.

*Chairman:* I think Dr. van Putten would like to make a contribution to that question.

*Dr. van Putten:* I have done quite a bit of work on veal calves in The Netherlands and I once defined a veal calf as a suckling from a socially living ruminant which is then not allowed to live socially, to ruminate, or to suck. I think that is the answer to the question. We should allow them to ruminate, to have a social life, and to suck. This is only possible if we use computer-controlled feeding systems and keep them in a social group after about 10 days of age. We are well able to do so. It is a question of investments and of a little bit more research. Obviously, it is not good enough to keep them in crates for about 2 or 3 months, or whatever it is (it is different from country to country). We have to keep them in the right way from the beginning, and we do have the means to do so.

*Ms. Tarreault (Concordia University Animal Rights Association):* I have a multiple question that I would like to address to the panel. First of all, given the guidelines set up by Dr. Broom for recognizing poor welfare for animals, would you not agree that the most intensive systems are poor welfare? And if they are judged so, should we continue using them regardless, or should we stop them? In other words, is not farming animals an alternative? What is the level of concern for animal welfare? Is it concern for the least offensive systems? Is it a concern taking into consideration business and things like that, or do we look strictly at animal welfare and concern for animals first?

*Chairman:* Who wants to reply first? Dr. Broom.

*Dr. Broom:* If I could just make a very brief comment concerning the calves which we were just talking about. I have had two research students who have worked on calf housing systems; one examined how to make early group-housing of calves work, and the other was looking at calves in individual pens and enriching their environment in various ways. If anybody wants to know any more details about this work, I can tell them afterwards.

In reply to your question, I think that what we have to do now, whatever your feelings about your ideal for the future, is to say there are very many animals which are kept on farms. The welfare of some of those animals is good. The welfare of some of those animals is poor.

What we need to do immediately is to try to see how we can improve the welfare of the ones which are having the hardest times right now, or whatever

sort of long-term objective you have (and different people will have different long term objectives). We need to try to alleviate the present situation; we need to say: what should we be doing in the next 3 years? What should we be doing in the next 10 years? My own feeling on that is that we need to pick out the biggest problem areas and say: let's get to grips with these and work out how to solve them.

That is my immediate philosophy.

*Ms. Tarreault:* How do you consider that the problem is solved if the problem is too expensive to solve; if, regardless of your guidelines, it is still poor animal welfare even though it is a bit better? Do we still continue doing it?

*Dr. Broom:* It is better if we can improve the welfare substantially than if nothing is done at all. That's the most important general point.

What I was advocating was that the scientist actually provides evidence indicating where the welfare is very poor and where the welfare is a lot better. Then the general public and the legislatures, who are affected by the general public, use the information to say: that is where I want to draw the line. Obviously, not everybody will draw the line in the same place. So scientists provide the evidence and the public makes the final decisions. There needs to be a rate of change which takes into account things like the welfare of farmers, as well as our desire to improve the conditions of the animals. I would certainly like to see change occur faster than it is now, but we have to take things one step at a time. If you argue that we have to have maximal change instantly then it will not happen, and it may be that nothing will happen. So the best strategy is to go a few steps at a time rather than to try to do the whole flight of steps at once.

*Mr. Bandow (Canadian Federation of Humane Societies):* Dr. Fölsch you outlined to us the advantages of the free range in the aviary system, and you hinted that some economic implications made it difficult to determine the impact that a change might have from country to country. I would be interested to hear how, for instance, Switzerland or other countries are going through the process of convincing producers to switch their systems. Does it happen when a system wears out and it needs to be overhauled? Or does it happen when new producers come on-stream and they then accept this new system? Because, clearly, producers are often the victims of circumstances, as much as the animals, and until we can shift the economic burden so that they can accept some of these new systems, we are not going to have it come about. I wonder if you could outline how this happens in Europe.

*Dr. Fölsch:* Thank you for your question. I would like to explain a little about the situation at present in Switzerland.

Say a political decision is made to ban cages. At the same time a lot of other things have to happen. For example, the public has to be informed that there are other systems in existence, not only the battery system. We have, for example, the free-range system, which at present houses about 30% of all hens in Switzerland and Austria. This system, and the hens in this system are not only valuable for consumers, but also, as I said, have ethological merit. So we have to support changes in this direction.

On the other hand, we are aware from our investigations that the battery system really gives no choice to an animal; there is no possibility of the hen being able to behave correctly. Once we, as responsible people who are trained as veterinarians and conduct research in the department of zoology, see this situation we have to act; that is to say we have to go to the public and show our results.

The second point concerns economics and further details are given in my presentation, especially in Table 3.

*Ms. Blonder (Rambling Rose Veal):* I know that there is a great deal of concern here about veal raising, and on a very small scale my company is raising the pink, red-meat veal. I am especially concerned about marketing, and attempting to convince consumers that they do not need to have white-meat veal. I just wanted to tell you that this is happening.

*Ms. Marx (Friends of Animals):* I have been working with farm animals for the last 6 or 7 years and I sense that countries outside North America have been a lot more progressive, that the atmosphere is more open to change, and I was wondering what we can learn and how we can start accelerating changes in the United States.

*Dr. Friend:* I would say you are probably right. Perhaps a perspective from outside the United States and Canada would be better. However, it may relate to the proportion of the population feeding and caring for the animals. As you know, fewer people are actually caring for the animals in the United States than would be doing so in some other countries with smaller farms.

*Dr. Broom:* I think that there is now quite a lot of research and investigatory work which relates to finding better methods of husbandry, including those which help farmers and those which improve welfare. There has been an increase in the amount of work of this kind in North America, with relatively more in Canada than in the U.S.A., but this seems to me, as an outsider, to be a very healthy situation, because you really need to have detailed information before changes can be brought about. It all seems to be happening rather slowly, and clearly the way to accelerate it is for more people to be encouraged to do it, for the work that they do to be more widely known, and for more funds to

be available. I think that doing that kind of research is one very important area.

The other problem is that of educating people throughout all countries as to what is happening. Most people, if we are talking about farm animals, do not really know a lot about how the animals are raised. I think we should be providing factual information rather than organizing campaigns which look emotional and which actually put off a lot of people. A lot of organizations could do this, including the producers of farm products.

*Chairman:* Of course, that is essentially the objective of holding this 2-day symposium.

*Ms. Gomeel (Vendor, Alternative books and magazines):* My question has to do with our use of language. How do you, Dr. Friend and Dr. van Putten, feel about replacing terms such as dam and farrowing with, say, mother and birthing as expressions with more humane overtones?

*Dr. van Putten:* I am against replacing these words, for after all we are dealing with animals and they are not less than human beings. They can in many aspects be better than human beings, but at the least they are different, and giving birth is something different in human beings than farrowing is in the sow, or calving is in a cow. The terms are different and I think we should try not to drift away in the direction of purely anthropomorphic thinking. It does not do much good.

*Dr. Dellmeier:* I would like to briefly point out that this is a double-edged sword. I think that what Dr. van Putten was trying to say is not so much that there is a dichotomy between human females and all other females on the Earth, but rather that there are species differences and for me, for example, when I hear the word "farrowing" it has connotations with nest-building and things that are unique to swine, which may be different from the way cattle give birth, which again may be different to what mares seek or need, or sheep or goats, and so forth. So I am afraid we have as much to lose by getting rid of some of these distinctions as we might have to gain.

*Ms. Clark (President, Canadian Society for the Prevention of Cruelty to Animals):* In regard to the situation in Switzerland and the Swiss law, I understand that by 1991 the battery cage system will no longer be legal in Switzerland. I would like to know what the impetus was for that law. We, in Canada, hear a lot about peer-pressure and codes of conduct being preferable to legislation, and there are arguments both ways. In Switzerland, did the legislation come first and the persuasion after, or was the public educated first and then readily accepted the legislation?

*Dr. Fölsch:* As I said previously there are several levels of activity; the politicians were not the first. It is the population that has the real interest, that understands animals and how they should live. We, as researchers, should maintain contact with the population, and the population should maintain active contact with agriculture and see what is going on. As Dr. Broom said, we will give correct information on the behaviour and needs of animals. When the population is well informed, they will know what is necessary and push the politicians.

*Ms. Clark:* Then what is the role of legislation?

*Dr. Fölsch:* Legislation represents our views. Legislation is realized when we will that things should change.

*Ms. Halverson (Animal Welfare Institute, Washington):* I really just wanted to make a comment in response to an earlier question. Someone asked about successful alternatives to the crate for veal calves, and I wanted to refer the audience to John Webster's most recent report published in 1986 ("Improved Husbandry Systems for Veal Calves"). Webster and colleagues concluded that the way to make loose-housing successful was to provide calves with continuous access not only to milk replacer, but also to solid foods, to digestible roughage, and to do this by means of a computer-controlled system so that the intake for each calf was known and controlled.

*Dr. Rowan:* I just want to speak on behalf of the visitors from Europe. They are all being very polite about the lack of progress in America on the farm animal issue. In comparison with the research and meetings and so on that are being held in Europe, America is about 10 years behind, and I would like to endorse Melinda Marx's comment that we hope that this is the beginning of a change in attitude and approach.

## **Future Factors and Biotechnology Applications in Animal Husbandry**

CHAIRMAN: C.M. WILLIAMS

*University of Saskatchewan*

We have just heard a tremendously exciting challenge. Producers and producing organizations have been given a measure which they can live up to and a challenge which they ignore at their peril, and the animal welfarists have been given a measure to which they must make their rhetoric apply, and they