

## Committee for Agriculture and Rural Development

# OFFICIAL REPORT (Hansard)

Bovine TB Review: Northern Ireland Badger Group/USPCA

29 May 2012

#### NORTHERN IRELAND ASSEMBLY

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#### Members present for all or part of the proceedings:

Mr Paul Frew (Chairperson) Mr Joe Byrne (Deputy Chairperson) Ms Michaela Boyle Mr Thomas Buchanan Mrs Jo-Anne Dobson Mr Chris Hazzard Mr William Irwin Mr Kieran McCarthy Mr Oliver McMullan

Witnesses:

Dr Pól Mac Cana Mr Mike Rendle Mr David Wilson Northern Ireland Badger Group Northern Ireland Badger Group Ulster Society for the Prevention of Cruelty to Animals

**The Chairperson:** I welcome to the table Mike Rendle, who is the co-ordinator for the Northern Ireland Badger Group, Dr Pól Mac Cana from the Northern Ireland Badger Group, and David Wilson, who is information officer with the Ulster Society for the Prevention of Cruelty to Animals (USPCA). Gentleman, you are very welcome to the Committee today. This is a very important inquiry for the Committee, and we have been looking at it in great depth over the past number of weeks. Bovine TB is a very important issue for the Committee and for the agriculture industry as a whole, and the Department of Agriculture and Rural Development (DARD) is taking our inquiry very seriously. Without further ado, could you give us your presentation. I am sure that you have a presentation for us. Maybe not?

**Mr Mike Rendle (Northern Ireland Badger Group):** As you know, we have provided a written submission, so we were kind of expecting to be answering questions about it. We are happy to field any questions that members may have.

The Chairperson: OK. We can go straight to questions. There is no problem there.

Obviously, bovine TB is a big issue here, and the wildlife reservoir of bovine TB is a factor. You have stated that the role of badgers and other wildlife in the transmission of bovine TB is poorly understood. Why is that the case? The disease has been around for many, many years, so why is it still poorly understood?

**Mr Rendle:** Part of the problem is that there have been 47 years of research into bovine TB, a lot of which has focused on the badger issue, probably disproportionately. It is interesting that, even after

47 years, there is not very much conclusive evidence to show that badgers contribute to any significant degree to TB breakdowns in cattle herds. To answer your question directly, I do not know why that is the case. My view is that badgers are probably not as pertinent to the problem as some people think they are.

**Dr Pól Mac Cana (Northern Ireland Badger Group):** There is another way of looking at it. Most of the conclusions in the science are based on circumstantial evidence. There is no clear evidence about which direction the disease is going in, or even about whether it is coming from a third, fourth or fifth source. Any kind of estimation by vets in any part of the British Isles is conjecture. When vets say that they attribute a breakdown to badgers, a lot of the time it is debatable. How can a vet decide that badgers are the cause? Has he taken samples from badgers on that particular farm on that particular day or over the years? TB is attributed to badgers in an awful lot of cases, but it is not based on hard fact or evidence that badgers on the land were carrying TB. Even if they were, did they give it to the cattle or did they get it from a common source or from the cattle? That is still very much open to debate and has not been proven in any paper, either here, down South or in Britain.

**The Chairperson:** I want to turn to biosecurity measures on farms and the need to improve and modernise farms. Do you think that this could be wrapped up in a farm modernisation scheme, whereby farmers could be incentivised to improve their feeding areas and barns to keep wildlife out? Am I right in saying that that is still a problem and a factor in the spread of bovine TB?

**Dr Mac Cana:** If you go down the route of believing that the principal cause is wildlife going into sheds and byres, then, yes, of course, any farmer should take that action to prevent the spread of not only bovine TB but any disease — bovine TB is not the only disease that needs to be tackled. At the same time, we think it would be useful to look at DARD's suggestion in its 2002 policy that we look at lateral spread in cattle as a result of nosing and hedging not doing the job it is supposed to do. OK, hedging may be preventing animals from breaking out onto somebody else's land, but it is not preventing cattle-to-cattle contact. It would be useful to deal with that, and it would fit in nicely with some of the biodiversity enhancement elements of policies in the Northern Ireland Environment Agency (NIEA) and perhaps also the countryside management scheme (CMS). By focusing on access to byres and sheds alone, you are assuming that the issue is badgers going into sheds, but there are other amplifier species, such as hedgehogs, feral cats, farm cats and deer. How do you mitigate the impact of those factors?

**The Chairperson:** DARD has undertaken research over many years, and it will tell you that it is undertaking more research over a five-year period. What do you think that DARD should be doing in its research? What should it be looking at and concentrating on? Also, for your groups, how much of a priority is the eradication of bovine TB, whether in cattle or wildlife?

**Dr Mac Cana:** It is a great priority on two levels, both for the vindication — not vindication, that is the wrong word. From my personal point of view, I would not be against a cull per se if I thought it would work. It is a priority in the sense of getting away from the stigmatisation of the badger and in terms of cattle welfare. We all have family members who are tied to agriculture. It is not as if we do not realise that. We have to think about the person first, but we also have to think about ourselves as taxpayers. We are all paying our taxes to pay for this, so everybody is involved. There are a number of layers and reasons for wanting to get rid of bovine TB; it is not just for the sake of badger welfare.

**Mr Rendle:** Speaking for the Badger Group, it is a high priority for us at a number of levels. Moving forward, we would like to see an evidence-based strategy, and we think that Northern Ireland is in a unique position to provide that. We certainly have the expertise. DARD has one of the best sets of data on bovine TB and on the wildlife aspect, and there is a lot more to be done with that. We would like any research programme to be broad. There is also an opportunity to get a better understanding of what role, if any, the badger has. One of the problems, as we see it, is that the whole issue has been polarised for so long. One side thinks that badgers are a problem while the other side thinks that they are not. The middle ground has not been addressed. A lot of resources could have been better spent addressing the middle ground and getting answers to more fundamental questions. As Pól said, a lot of assumptions have been made about the role of the badger in TB, but we simply do not know. We would like to see any research programme trying to answer some of the questions.

**Dr Mac Cana:** DARD has a great amount of information on cattle herds. We need to look at this from the point of view of multivariate analysis and ask about the implication for pedigree herds. Genetic similarity means that animals will be more susceptible to a disease if one comes down with it. You have the issue of anergy, which is a big factor with TB. You can have animals that will always test

negative for the disease because their immune systems are so depleted. They will remain in the herd and continually excrete the bacterium around other cattle. That needs to be quantified.

As regards farm management, the data that is out there needs to be analysed, including data on numbers of herds, breeds of herds and — I suppose you would not use the word "inbreeding" — how many pedigree herds there are in the cattle industry in Northern Ireland. We need to look at those factors and find out which farms are more susceptible and why. Is it because the badgers always happen to be beside the largest dairy cattle farms with pedigree animals? Could that be the case? We need to look at it from that point of view and see what is going on with that massive amount of data that is sitting there waiting to be researched.

The Chairperson: David, in your paper on behalf of the USPCA, you said:

"the USPCA regards the proposed culling of badgers as a short sighted attempt at a solution already been tried by the Republic of Ireland with thousands killed over an eight year period, a needless slaughter that failed to make a meaningful impact on disease levels."

I take it that you have been looking very closely at that.

**Mr David Wilson (Ulster Society for the Prevention of Cruelty to Animals):** Yes, I think that my colleagues in the Badger Group can confirm that as well. The USPCA is an animal welfare charity. Our objective in life is to prevent suffering in animals; all animals, regardless of breed, whether it is badgers or whatever. We perceive the slaughter of badgers as being a bit like the shooting of seals. The salmon do not come back; when they are gone, they are gone. The culling of badgers is short-sighted. It will become the only solution in town, if it is a solution. It would be much better for us to put our resources into another solution. We have a lot of pharmaceutical talent in this country. Surely, if we put our resources into developing a vaccine for cattle, it would take the heat off the badger, improve the health status of cattle and perhaps make a little bit of money for the country.

Why we have three of four parts of the British Isles doing their own thing is another thing that is lost on us. The Welsh Assembly is dealing with the issue of badgers, the Department for Environment, Food and Rural Affairs (DEFRA) in England is doing the same and we are talking about it today. Would it not be possible to get brains together and come up with a common solution instead of heading off in our own directions?

The Chairperson: OK, thank you very much. I will open the floor to members.

**Mrs Dobson:** I have listened with great interest. Point 4 of the Northern Ireland Badger Group's submission states that a vaccine is:

"the most direct and robust method of dealing with bovine TB".

David mentioned putting brains together to try to get a vaccine. When my husband was at Greenmount 30 years ago, people were talking about a vaccine. They are still talking about one, and we are still being told that it will be many years before one becomes available. It is taking some time to get there, and I am sure that the brains have been available in that time. Is a vaccine that does not exist realistically the best suggestion we have for eradicating TB?

**Dr Mac Cana:** First of all, all vaccines take years to develop, whether it is in human medical science or veterinary science.

Mrs Dobson: We have had a lot of years to develop this vaccine.

Dr Mac Cana: Well, we are talking about maybe five or six years, which is long enough but —

Mrs Dobson: My husband said it was being mentioned in Greenmount 30 years ago.

**Dr Mac Cana:** From our point of view, the vaccine is a short-term fix. In economic terms, we realise that it will not be effective in the long term. I am talking about the badger vaccine. A cattle vaccine could be part of the solution. Are you talking about vaccinations for badgers or cattle or both?

Mrs Dobson: Both. I want to hear your suggestions about a vaccine for both.

**Dr Mac Cana:** Both vaccines should be investigated and rolled out. The badger vaccine is a short-term solution, because we cannot afford to go out year after year vaccinating the next generation of badgers and then the generation after that. It is a short-term solution until we get something sorted out.

The cattle vaccine is perhaps a better way forward in the longer term. That has to be done in conjunction with a secondary test to find out whether an animal that has been vaccinated has subsequently become infected with the disease. That is where the vaccine is hitting most of the difficulties. It is not just a matter of putting out a vaccine for the cattle. If that were the case, every cow in the country would be getting the BCG that we all got when we were children. The whole point is that we need to monitor that afterwards and make sure that we can tell which animal has the disease. We are getting closer to that scenario and the science is getting closer to that.

Mrs Dobson: We are still not there yet.

Dr Mac Cana: Of course not, no.

Mrs Dobson: I would like to hear what other suggestions you have.

**Mr Rendle:** If I can refer to my earlier point, because of the obsession and the polarised debate on badgers and culling, research into a vaccine has been under-resourced. Over the past few years, there has been a very big shift in that. The conclusive evidence now is that cattle-to-cattle transfer is the primary factor in the spread of TB, so people are taking the idea of a vaccine for cattle much more seriously. So, I think that we are going to see quite a lot of progress in a relatively short period, compared with 30 years ago. Secondly, badger vaccination trials are already under way in Great Britain, so there is a lot of progress being made on the badger front.

**Mrs Dobson:** You say in your written briefing that you make a positive contribution to the Northern Ireland bovine TB strategy. However, as the Chair said earlier, and as we on the Committee are all well aware, herd incidence is on the rise, which is a significant cost to farmers in the industry. What specific, positive aspects do you feel that your contribution has brought to the strategy? Will you outline those?

**Mr Rendle:** We are waiting for the opportunity to contribute to the strategy. To date, the Badger Group and the Badger Trust, which we represent in Northern Ireland, have not been included in any stakeholder groups or other processes. We have been very much on the outside.

**Mrs Dobson:** What did you mean when you said that you make a positive contribution to the strategy?

**Mr Rendle:** That is what we want to do; we want to make a positive contribution. We would like to think that we can offer specialist experience and knowledge about the wildlife aspect. The Badger Group draws its membership from people from all walks of life. People do not come to the Badger Group with a very narrow understanding or remit. The group is probably exceptional among many of the groups with an interest in TB in as much as it members do not come from one particular point of view. We have a hybrid vigour in that we have people with different areas of knowledge.

**Dr Mac Cana:** It is important to make the point that, although recent figures have shown that the incidence of TB has gone up, from a scientific point of view, you must look at the trend over many years. Looking at the trend over three or four years is not enough. When work was being done on a trial cull in England, even at the beginning of the study, the scientists were saying, "You have this going on for nine years, but it will take 15 or 20 years to get any meaningful statistics". You cannot base it on a rise in TB over a couple of months. That only means that more animals reacted; it does not mean that the problem is escalating. It just means that there is a fluctuation, just like with any disease, whether in humans, pet dogs or badgers.

**Mrs Dobson:** Earlier, Mike mentioned that, 47 years ago, the research was wrongly focused. We have had quite a long time to get this right.

Dr Mac Cana: I would not say that it was wrongly focused ---

Mrs Dobson: Those were his words, not mine. I wrote them down when he said them.

**Dr Mac Cana:** I would not say that it was wrongly focused, but maybe it has been blinkered in a sense. Of course the badger aspect should continue to be studied, but there are wider aspects. We need to look at the escalating deer population. We also have a feral ferret population, which can carry the disease. What are we going to do about that? Hedgehogs can carry it and so can pigs, dogs and farm cats.

Mrs Dobson: In your briefing, you say that, in relation to badger culling, there is:

"hearsay, misinformation and a genuine lack of understanding of the core issues."

Who do you level that criticism at? Is it the farmers or DARD?

**Mr Rendle:** I have read statements in the press from across the community, and I have noticed that many of them are inaccurate. I would not aim that at any one sector or specific individuals. It was just a general observation.

**Dr Mac Cana:** It can be mentioned as a general thing; it does not mean that it is a criticism. TB is a very complicated disease and this is a very complicated situation. Do we all understand every aspect of society here? No. A lot of things are based on hearsay. It is not about levelling —

Mrs Dobson: So you are not levelling that criticism at any one in particular.

**Mr Rendle:** It also applies to people on the badger side. I have spoken to people who feel that culling is terrible and that badgers should not be culled. However, those people have no understanding of the issues around TB. They just think that culling badgers is a bad thing to do.

**Mr Byrne:** I thank you for your presentation. I have three points. On page 2 of your document, you say:

"There is reliable primary and anecdotal evidence that a minority of individuals ignore, flaunt or exploit existing guidelines and regulations."

What does that mean? What evidence is there of that?

Mr Rendle: I am not suggesting that that is systemic. I used the word "minority" ----

Mr Byrne: Is it real or imaginary?

**Mr Rendle:** It is real. People have been prosecuted for tag fraud; changing the tags on cattle. That has biosecurity and disease implications.

**Dr Mac Cana:** The Department's 2002 policy mentioned that that issue existed. The Department knew that that was a fact back in 2002.

Mr Byrne: Are there any quantitative figures for that?

Mr Rendle: No. I do not think that there are. I suspect that it is under-reported.

**Mr Byrne:** You seem to be in favour of vaccination of cattle but not in favour of vaccination of badgers.

Mr Rendle: We did not say that at all.

Mr Byrne: Relatively speaking.

Mr Rendle: No -

**Mr Byrne:** I am surprised that you are so keen on vaccination at all. Surely, if we are talking about animals that will be sold into the food chain, vaccination generally is a worrying aspect of modern life.

**Dr Mac Cana:** Personally, I am not too concerned about vaccination. I might be more concerned about dosing an animal up with antibiotics before it goes into the food chain, but I am not that concerned about an animal that has been treated with an antigen at a certain stage in its life.

**Mr Byrne:** I take it that, on balance, you are more in favour of vaccination of cattle than vaccination of badgers.

**Mr Rendle:** It is not that we are not in favour of vaccinating badgers. We do not have a problem with vaccinating badgers.

Mr Byrne: I am just asking about the relative emphasis.

Mr Rendle: We think that vaccinating cattle will make a bigger difference to the problem of bovine TB.

**Dr Mac Cana:** From an economic and long-term sustainability point of view, vaccination of cattle is easier and more effective and provides more value for money. You have to catch the badgers, give them a vaccine, and then go out again. You do not have the badgers sitting in a pen waiting to be vaccinated every year. You have to go out and catch them again, which takes an awful lot of money and man hours and is highly ineffective. In the short term, a high level of effort on badger vaccination might be useful. However, in the long term, we cannot afford that.

**Mr Rendle:** The other thing is that by vaccinating badgers we are making the assumption that they are responsible for TB breakdowns in herds, but we do not know that.

Mr Byrne: I am referring to your document; that is where I am drawing the inference from.

**Mr Rendle:** You are entitled to draw the inference, but I am telling the Committee that we have no objection to vaccinating badgers. We think that vaccinating cattle would be a better way forward, but there is no reason why both cannot be vaccinated.

**Mr Byrne:** I am raising the issue of vaccination as a method of control in trying to get to a position of Northern Ireland enjoying disease-free status. From what I can pick up, you are emphasising the vaccination of cattle more than anything else.

Mr Rendle: No, that is not the case.

Mr Byrne: Sorry for getting the wrong impression.

**Mr Rendle:** The vaccination of badgers is widely mooted, and we have no problem with that. We have found that the vaccination of cattle is not so widely discussed, which is why we made a point of mentioning it in our submission.

Mr Byrne: Finally, what are your views on the compensation system that pertains in Northern Ireland?

**Mr Rendle:** We made a submission to DARD's recent consultation on compensation. With caveats, we feel that farmers who lose animals to TB should be adequately compensated. We see the compensation scheme as having several benefits. First of all, it is an incentive for farmers to report TB in the open. It could also be used as an incentive to improve biosecurity and promote good animal husbandry.

**The Chairperson:** I have one wee question on what Joe brought out. Mike, you said that it is not yet established that the spread of bovine TB is caused by wildlife and badgers. I have figures here from an EU plan that DARD submitted. DARD reckons that local spread accounted for 25% of the spread. The other figures were: badgers, 16%; purchase of animals, 12%; carry-over, 7%; and other, 5%. Interestingly, there is a "not established" section accounting for 35%, which could tip any of the other sections close to 50%. Are you discrediting those figures?

**Mr Rendle:** I would like to know where they got the figure of 16% from. It may well be that 16% of farms had badgers on them; I do not know. As far as we are aware — and I think that Pól can support this — there are no figures that allow us to attribute cattle breakdowns to badgers. It can only be speculated.

**Dr Mac Cana:** My major concern is that we do not know how those figures were arrived at. Who decided them? It may have been a vet who said to the farmer, "You did not buy in any cattle. I cannot see that the animal is anergic. There is still an animal spurting out disease on the farm. You said that there is a badger in the area so, by default, it must be the badger." Of course, a percentage of those cases could perhaps be attributable to badgers, but there is no scientific back-up for that. The vet cannot say that he definitively knew that or that he is an ecologist who went out to discover what the cause was. The vet is a mechanic of the body; he is not an epidemiologist. He is not chasing badgers to find out where they are going and whether they are going into sheds. They are the Department's figures, but how were they come upon?

**Mr Rendle:** I want to mention the 2004 task force meeting of the bovine TB subgroup. Mr Abernethy delivered a report that suggested that 22.9% of the breakdowns were attributed to badgers. In fact, somewhere else he says that it is suggested that approximately 40% of breakdowns may be attributed to badgers. I do not know where these numbers are coming from either. I would definitely dispute these figures.

**Dr Mac Cana:** From a scientific point of view, it just does not hold water. We need to know how these vets assessed that the badger was the source.

Mr Irwin: Thank you for your presentation. I declare an interest as a farmer.

As a farmer, I have noticed a big rise in the badger population on the ground. Is that right? You should know whether there are more badgers in Northern Ireland than there used to be.

I agree with you up to a certain point. The Department has not done enough to deal with the badger issue and ascertain to what degree badgers are responsible for bovine TB. We have seen TB outbreaks in closed herds that had no access to other animals. One particular herd was kept in an area with a forest behind it and nearly 200 animals went down with TB. In that situation, I believe that the Department should be doing more. It should be surveying that farm to assess how that came about.

If the Department were to prove that badgers were the cause of a major TB outbreak on a farm and there were diseased badgers, would you agree to a cull of those badgers?

Mr Rendle: We would be reluctant to recommend any sort of general cull because ----

Mr Irwin: I am not talking generally; I am being specific.

**Mr Rendle:** OK, I am just qualifying what I am saying. However, we would support a catch, test and remove strategy whereby badgers that are tested and shown to be diseased are removed. Is that helpful?

Mr Irwin: Well, slightly, yes. I am actually surprised by your answer, but I welcome it.

**Dr Mac Cana:** You asked whether badger numbers are increasing. A recent NIEA survey has shown that they are not.

Mr Irwin: We think that, on the ground, it looks that way.

**Dr Mac Cana:** Certainly, I take that on board, but NIEA's data says that they are not, and new data from the South would suggest that their estimate was an overestimation.

**Mr Rendle:** Badger numbers tend to fluctuate during the year, as do numbers of other wildlife species. I have an interest in other wildlife species, and people say to me that there are lots of such-and-such around this year. There are not; it is just that, because the numbers fluctuate, people happen to see a lot of a certain species at one time. As Pól says, the most reliable evidence suggests that, generally

speaking, the badger population in Northern Ireland is stable. Certainly, that would be our observation, too.

To go back to your question about the trap, test and remove strategy, our caveat would be that it must not be used as a reason just to kill badgers. We would like to see it done in a scientific way so that we can find out what the incidence of TB is. We would like the process to be informative, not just one that is used to kill badgers.

**Mr Irwin:** As a farmer, I can assure you that no one wants to kill badgers. In farmers' eyes, culling good animals is worse than culling badgers. There has to be some acceptance of that, too. Large numbers of healthy animals have caught the disease and have had to be culled. You did mention vaccination of badgers, but I noted that, in Wales, a top scientist on the eradication board resigned because they decided to go down the vaccination route rather than have a cull. He said that an infected badger that is vaccinated can live for a number of years and still spread the disease.

**Dr Mac Cana:** It is a process with any vaccination. Do you know what I mean? You can do the same with cattle. Any human child infected with TB who then gets the BCG vaccination is still infected. It is about working with the population to weed out the disease over time. It does not hit the disease and stop it from the outset, and we have to accept that.

Mr McMullan: If you do not think the badgers have TB, what do you think spreads it?

**Mr Rendle:** I don't want to nitpick, but we do not doubt that badgers have TB. The DARD road traffic accident (RTA) study and other studies show that somewhere between 12% and 20% of badgers have TB. That does not mean that they are sick or that they can spread the disease. A study in England with the Krebs trials showed that around 2% of badgers possibly have the capacity to spread the disease.

There are a number of gaps in the system that is in place. The most obvious one is the skin test that is used to test cattle for TB. That test misses 25% of infected animals. That means that those animals remain in the herd and can infect other animals in the herd and can be moved and infect animals elsewhere. Now, 25% is a large number. You probably have better figures than I have, but I think that the incidence of TB in Northern Ireland is at 5% or 6% at the moment. While that is not a big figure, it is too big. We want to eradicate the disease. However, 25% of infected animals are not detected when tested. When you consider the 6% level of the disease and the 25% missed just by the test, it puts the whole thing into perspective — at least, it does for us. Whereas, only 2% of badgers are sick enough to spread the disease, if they get the chance. After 47 years of research, no one has shown how badgers give cattle TB. It has never been proven.

**Dr Mac Cana:** It is also important to note that, while it is often quoted that Britain and Ireland have failed to eradicate TB from their herds and the rest of Europe has, in Europe there is a slightly different test. Their approach is one strike and you are out, whereas we have a comparative test, which gives the disease a little bit of a loophole, with avian antigens put in as well. We are giving the disease a chance that it does not have in France or Germany. We accept that and we accept that the test is not infallible.

**Mr McMullan:** Do you agree that in other parts or Europe and the rest of the world, culling infected animals has a good effect in the eradication of the disease. All these studies have been done. Are you saying that all those studies are flawed? You gave examples from England and Wales. Can you explain why TB is so low in Scotland, when there are badgers in Scotland, and you say that 25% of the cattle are missed and are still in the herd, but it only takes one badger, for example, to move 3 km or 4 km and it can infect more than 25% of a herd?

**Dr Mac Cana:** But there is a presumption that it is the fault of the badger as well. The agriculture varies greatly across Britain and Ireland, and there is no doubt about that. In the hotspots in south Wales or in the west country of England there is really intensive farming. The hotspots here are in the good lands of County Down. The type of land management may be a factor. It is good for production, but it is tough on the animals and reduces their immunity to disease, and they are more susceptible to other diseases due to stress. When there is a large number of animals in one herd, it is stressful for an individual animal, whether we notice it or not, from an immune point of view. It is not just about badgers and their ecology; it is about climate and the other diseases out there that interact with TB and make animals more susceptible or lower protection against the disease. It is very complicated.

**Mr McMullan:** Who would you say has given a reasonable version of the TB scene? Obviously, what we are looking at — I am nearly quoting you in saying this — are reports that are flawed. I say "flawed" because you have disputed the results. Where do you see a reasonable assessment of the whole TB scene, going back to the mid- to late-1940s, through the outbreak of foot-and-mouth disease, when TB went down, before going up again? There is low density of TB in Scotland and differences in density between England, Scotland, Wales, and here. Where would a member of the public go for a clear version of events on TB? If you knock something — culling badgers, for example — you must come up with a reasonable argument as to —

Dr Mac Cana: If we knew where to go, we would tell you, and we would be there already.

**Mr Rendle:** That is a very good point, and I think it is because the whole thing has been polarised for so long. There is a great deal of self-interest. People give the point of view that they want you to hear. People cherry-pick. This is one of the problems with inconclusive evidence. We can sit, pick through the evidence and say that badgers are innocent. Someone else can pick through the evidence and say that we need a cull. You can decide what you want. We are suggesting that Northern Ireland is in a position to make its own very objective assessment of what the problem is.

Mr McMullan: You say in your submission:

"It is our experience - and we are constantly surprised by it - that some long-established large animal veterinary practitioners have a very poor understanding of bovine TB".

How do you explain that?

**Mr Rendle:** I have spoken to vets who have been out testing cattle, and I have tried to engage them on the bovine TB issue. I cannot, because they do not know anything about it.

Mr McMullan: They do not know anything about it?

**Mr Rendle:** No. In fact, on some occasions, I dispute what they think they know. One vet told me that animals rubbing noses over a fence is not a problem.

**Mr McMullan:** So, vets do not know a wile lot about it. Can you tell me about the compensation part of your submission? You state:

"individual farmers that have met the requirements of existing guidelines and regulations should not be penalised financially".

How are they penalised?

Mr Rendle: They are not at the moment.

Mr McMullan: That is what it says here.

Mr Rendle: No; hang on. If ---

Mr McMullan: I am only reading out -

The Chairperson: I think he is talking about the future.

**Mr Rendle:** We are talking about cattle compensation. We are saying that, whatever happens about cattle compensation, we believe that farmers should not be penalised for something that they have no control over. We have put caveats to that in the submission that we made to DARD.

Mr McMullan: OK. Thanks for your presentation.

**Mr Buchanan:** It has been an interesting discussion. There has been quite a bit of research into this, and it has been with us for quite a number of years. Different things have been tried, and we have

heard about vaccination. We have heard that you are not in favour of culling badgers. Yet, in your concluding comments, you state:

"We believe that TB-free status in Northern Ireland is possible but can only be achieved by adopting a fresh perspective on the problem."

As a Committee, we are looking at the situation to see what can be done and what the Department should be looking at to try to reduce TB or eradicate it if possible — I do not believe that that is possible. If we are take a fresh look at this, vaccination is not perhaps the way forward; culling badgers is not the way forward. You tell the Committee today, in simple terms, what the way forward is. You are saying that we need to take a new, fresh look at the problem in order to see how we should deal with it. This Committee is looking for fresh ideas so that it can inform the Department on how it can deal with the issue and get rid of it. Give us those fresh perspectives and new ideas today.

**Dr Mac Cana:** First of all, you look at all the data on cattle that DARD already has and, more or less, analyse that to death. You look at the relationships between the various aspects of cattle management. You cut down on the chances of farm-to-farm spread of the disease by looking at that honestly. You also look at the issue of private veterinary practices doing tests for their clients. DARD has mentioned that perhaps that is an issue. I believe that DARD officials find 2% more cases of TB than private vets. Is that something that needs to be tied down? Does it need to be more neutral? Does it need to be blind tested in some format? I think that that could be one answer.

If farmers can be incentivised to make stock-proof and contact-proof fences, that would be useful in the wider countryside in general and in preventing not just TB but other diseases. If we still come to the conclusion, through continuing badger research or whatever, that badgers are still an issue, we will come back and look at that very small percentage. If badgers account for 25%, what about the other 75%? As I said, I am not too keen on the science behind that figure of 25%, but you can work on the other 75% quite easily with human intervention. Let us look at those issues, deal with them and make sure that they are crossed off the form.

**Mr Buchanan:** How much longer are we going to look at this before we take action and do something about it?

**Dr Mac Cana:** Until we are happy with the results and the robustness of the science from the culls in the South. Two of the counties involved are just over the border, so they are pretty representative of Northern Ireland. Why reinvent the wheel in that scenario? We have cull data there already. If culling were the way forward, the answers should have come out of the cull research that has already happened. That has been disputed by some of the top scientists commissioned by Westminster.

Ms Boyle: Thank you for your presentation, guys. Your paper states:

"The Badger Trust's objectives are to promote the welfare, conservation and protection of badgers ... The Trust ... works closely with Government, the police and other conservation and welfare organisations."

How well is that working, and what more could be done through joined-up working? What more could you, the PSNI and government do to deal with badger baiting?

Your paper also states that here in the North:

"The number of reported badger persecution incidents ... increased significantly following the announcement in December 2008 of DARDNI's intention to progress a 'badger prevalence study'."

When another member asked how many people have been charged and convicted with badger baiting over the past three years, the answer was none. So what more can be done to try to eradicate the problem of badger baiting?

**Mr D Wilson:** The USPCA has been concerned about that for years. We have seen it increase. It was widely reported a couple of months ago, and evidence was put before the public to show that it was going on. Arrests have been made, and progress is being made. People are appearing before the courts. However, you are quite right: for two or three years before that, nobody appeared before a court. I have been in the USPCA for the best part of 15 years, and I cannot remember a successful

wildlife prosecution in relation to badger persecution in that time. Part of the problem is that what we are talking about now is the perceived link between badgers and bovine TB. Badgers are being culled unofficially. People moving from the city to the countryside are either coercing farmers or are occasionally having a blind eye turned to their activities. That causes us a lot of concern because we now get more victims. Badgers are being persecuted, torn to shreds and dogs are being equally destroyed in the whole process. Biosecurity is being breached by these boys, who travel from one farm to another in their Transit van with a dog trailer on the back. They use the same implements and tramp over different fields and so on.

There will have to be some science-based solution to this. I do not think for one minute that killing every badger in the country would make bovine tuberculosis disappear. It would not. We even see the cattle as victims in all of this. They are the creatures that are getting the disease and being slaughtered long before their time.

One of the problems is that the PSNI does not have wildlife crime officers with warrant cards. It has one wildlife liaison officer, and that is a civilian post. We would love to see each division of the PSNI having a dedicated wildlife officer. They could do their other jobs as well, but they would be the central point for that division to whom things are reported and would have the knowledge to investigate. Every police force in the rest of the UK has that, and it is very successful. Operations are much more successful over there than they are here, and I think that is the reason.

**Ms Boyle:** Yes, and that is something that I feel could be easily managed. The word on the ground is that this usually happens very early on Sunday mornings.

Mr D Wilson: It is predictable in the extreme, like a football match.

Ms Boyle: Absolutely, so the PSNI could have a dedicated animal welfare officer.

**Mr D Wilson:** As a charity, all we can do is try to inject a bit of insecurity into their activities to make them feel that they do not have the same run of the country that they had before. However, it is really down to the PSNI. It is also down to the Environment Agency to get in there and investigate sett interference. The whole thing about badger persecution blurs the bigger issue that we are talking about as regards cattle TB. Nevertheless, it is a horror story from our point of view.

**Mr Hazzard:** Thank you for your responses so far. I more or less agree with some of what you have said, especially in regard to the role of badgers and other wildlife in the transmission of bovine TB being poorly understood. I have been on the Committee for only a month, and it is apparent from both sides that the level of understanding is, to say the least, sketchy and there is confusion out there. You touched on the fact that some EU countries do not leave the loophole that is, perhaps, left here. Will you expand a bit on what exactly you mean?

**Dr Mac Cana:** That is a tough one. It may be that we should debate again whether it would be economical to go down the tougher line of the other countries in Europe. That would have to take into account the prevalence of avian TB in Northern Ireland and the rest of the British Isles in comparison to those countries. We obviously have the comparative tests so that farmers are not losing cattle left, right and centre to TB carried by birds. That may be an avenue of research. We know that the test is faulty.

We know that the guys on Stoney Road here are doing lots of good work to try to find better and more precise tests. However, it may be that we should revisit that whole idea of the single test as opposed to the single comparative test. Ours is a double test that — I am sure that those of you from farming backgrounds know — compares the two, whereas, in Europe, if an animal reacts to the bovine test, you are out. So it is more draconian, but has worked for a lot of those countries. I am not saying that that methodology is totally transferable, but it would be worth looking at.

**The Chairperson:** Have the Badger Group, your sister organisation the Badger Trust or the USPCA ever researched what is done in other European states?

**Dr Mac Cana:** Not that I am aware of. I just know that it is more draconian over there and it works. However, that is in a different climate and a different environment. I am not saying that what works in France will work here. The Chairperson: William, do you want in for a short question, after which I have a couple to ask.

**Mr Irwin:** Very small. We are told that 16% of cattle are infected through badgers. I believe that the proportion is higher, because if you have a large herd and one animal is infected by a badger, the infection spreads through the whole herd. Initially, your figure may be right, but I suspect it is much more than that.

We got a paper here a couple of years ago, maybe slightly longer, on a badger cull that took place in Shropshire in England in, I think, 1982. There was not one case of TB in that area for 10 years. What do you say to that?

Dr Mac Cana: That sounds great for them down there. I do not know.

Mr Irwin: We got a paper, and that is what it told us.

**Dr Mac Cana:** I have never come across that. I spent four years researching the issue, and, to be truthful, I never heard about that cull.

Mr Irwin: I will dig it up for you. We got a paper.

**Dr Mac Cana:** I do not have an answer to that. Do we know that the TB cases were totally wiped out in the badgers in that area? Deer are rife with TB in England.

Mr Irwin: I am only talking about that particular area, which was a hotspot.

Dr Mac Cana: I do not know. I do not have the answer. I would need to know more about it to throw out an idea, but it would only be an idea.

**Mr Rendle:** One of the problems with culling studies is that they tend to take place in parallel with cattle-based controls. Usually, it is very hard to tell whether any change in the rate of TB is down to the badger intervention or whether it is something to do with the cattle controls, the weather or the time of the year.

Taking Ireland as a single piece of land, there are two fairly different systems of TB control in place in the North and the South. In the South, they cull something like 6,000 badgers every year. The studies that they did down there predicted a fall of between 40% and 90% in bovine TB through culling, but that has not been reflected at all in figures for the changes in the rate of TB in the Republic. In fact, the rate is very similar to that here. In Northern Ireland, the level of TB was reduced by 50% in cattle without any culling. That size of a reduction has not been seen anywhere else, much less in the Republic.

Mr Irwin: I would question that. Where did you get the 50% reduction figure?

Dr Mac Cana: DARD.

**Mr Irwin:** Between 1997 and now, there has been no reduction. The level now is very similar, if not higher, to what it was in 1997. Sorry, I mean 1998. There has been a reduction from the height of TB in 2002, which is completely different.

**Mr Rendle:** The 50% reduction has been since 2002, which is when the rate peaked after the outbreak of foot-and-mouth disease.

**Mr Irwin:** That does not give a true reflection of where we are. The rate is probably higher today than it was in 1997 and 1998. There certainly has been no reduction over that 15-year period.

**Mr Rendle:** The other interesting thing is that the Republic of Ireland was deemed to be TB free in 1965, and they certainly were not culling badgers then.

**The Chairperson:** I have a couple of questions, gentlemen, if you can bear with us. You have been here quite a long time, but this is very important to us, and it is good that you have had the opportunity to address some of the concerns that the Committee has.

You talked about the vaccination of badgers being the cheaper alternative to culls, and you go into a wee bit of detail about the badger population. Do you have a concern that even having to capture the badger, either by snare or by cage, will damage the population? It could end up moving badgers around the country, which could have a detrimental effect on the badger itself and heighten the spread of the disease. I know that you are still of the mindset that you cannot blame the badger, but every other body and group that we have talked to would suggest that a reservoir in wildlife has a bearing. How concerned are you about the vaccination programme, the practicalities around that and the damage that it could do to the badger population?

**Mr Rendle:** It is the lesser of all evils. All the culling trials have shown that affecting the dynamics of the badger population potentially makes things worse.

Cage trapping them for vaccination or testing and removal is acceptable to us. There are welfare issues, but we want progress. We very much want to address the middle ground. It would not be helpful to sit and say, "No, you cannot touch badgers." That is not where we are. Two or three of the members have asked what we mean by a fresh approach, but that is our fresh approach. We genuinely want to engage. If people feel that badgers are a problem, let us answer questions about badgers. Cage trapping for vaccination or for testing and removal, if necessary, is not ideal from an animal welfare point of view, but, if it helps to progress the work and answers questions, we would support it.

**Dr Mac Cana:** To clarify, I could not say that badgers do not give any TB. I would not like to put a figure on it or say that that is the main issue. It would be like saying that all cancer is caused by smoking; you cannot say that.

The Chairperson: I understand.

**Dr Mac Cana:** If culling happens, it will be intensive and long term. Within every social group, there are animals awaiting the opportunity to take over any free land. That is what they found in the culls in the South. Over the 10 years, they went in and tried to wipe them out. It was not the case that there were five or six years in which there were no badgers in the cull areas. There were always animals trickling in or a residue of animals there. It is a long-term cull. It is not a matter of just going in and, bang, now we are safe for 10 years. We will have to spend a lot of money on it, and it will be year-in, year-out. It is not a long-term scenario, and the badger population will increase naturally. Unless we take an island approach, it will not work forever.

**The Chairperson:** You talk about the vaccination of cattle as the best vaccination scenario, but take the vaccination that we have for cattle at present. First of all, the EU will not allow because of concerns about the food chain. However, how concerned are you that it would mask the levels of disease to some degree?

**Dr Mac Cana:** As we were chatting about earlier, the development of the vaccination has been slowed down by our desire to try to get a means around that. We have animals that are vaccinated, but we do not have an additional test that could get through the muddiness of that and enable us to say, "No, this animal is excreting a disease. It is infected, not just vaccinated." That is a big issue that we need to get over. We must not mask a disease. I am concerned about that myself from a farming point of view.

**The Chairperson:** Yes. When we have talked to the Department about cattle compensation, we have always said that, before cattle compensation, we need a holistic approach. We need to look at all angles and incorporate everything into an eradication plan. We are not saying that TB will be easy to eradicate. Some people might think that it is impossible, but action would certainly lead to a reduction. Do you see the USPCA and the Badger Group ever getting to the point where you could support an eradication plan that covers all angles and is all-inclusive and might mean a cull?

**Mr Rendle:** Our position, and that of the Badger Trust, has always been evidence led. I cannot second-guess the thing. If someone produces evidence that badgers are a significant factor in herd breakdowns — that evidence is not there yet — we would review our position. We are not at all intransigent about this. We represent a very wide range of people interested in badgers, and not everybody will agree on that. To date, however, everybody has been behind an evidence-led approach, and I do not see that changing.

**Dr Mac Cana:** Perhaps there should be a targeted approach, as Mike was saying, involving capture, tests and, if necessary, removal. My experience, and the research in which I took part, showed that, often, animals in one badger group are clean, and we really want to keep them. Going in and wiping them out just messes up the dynamic of the badger population and lets other animals move over a greater area that is no longer defended. That could make the problem worse, not on a grand scale but locally. As we said earlier, everybody, including farmers, wants to keep the clean animals. I do not see what use a blanket cull would be. It might be a waste of money in the long term.

The Chairperson: Have you anything to add, David?

**Mr D Wilson:** Only that I would approve of the trapping method being used to remove infected animals from the scene. I just do not want a hammer to be used to crack a nut. I would like research to be carried out in a confined area and for us to look at the results before considering any widespread cull.

**The Chairperson:** I have only two more questions, I promise. Is there any research on the effect on the ecosystem of removing all badgers?

**Dr Mac Cana:** No such research has been done. I am sure that, under European law, it would not be allowed anywhere in the EU.

There is an issue that another amplifier species could be released, increase in number and, perhaps, maintain the disease. In future, deer will be a big TB problem, as their numbers are increasing. It is not easy, and there will be a shift. Avian TB might be shifted because badgers, whether we like it or not, take an awful lot of bird eggs on the ground. Does that mean an increase in avian TB or implications for testing? I do not know.

**Mr Rendle:** I think that, in that case, it would be important to invoke the precautionary principle, which is the first recommendation of the Northern Ireland biodiversity strategy: if you do not know what the impact will be, do not do it.

**The Chairperson:** What is the current status of the planned cull in England, and what is the Badger Trust's position on that?

**Mr Rendle:** The Badger Trust is taking legal action that will be heard next month. I cannot remember the exact date. It is challenging the coalition Government's plan to license farmers to free-shoot badgers. The appeal has been granted on three grounds. Sorry, I cannot remember the details, but the fact that it has been granted is significant in itself.

**The Chairperson:** Members have no further questions. Gentlemen, thank you very much for your attendance and for answering our questions.

Mr Rendle: Thank you. That was a very engaging and helpful discussion.