



Northern Ireland  
Assembly

Committee for Agriculture and Rural  
Development

# OFFICIAL REPORT (Hansard)

Strangford Lough: DARD/AFBI Briefing

19 November 2013

# 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)  
Mr Thomas Buchanan  
Mrs Jo-Anne Dobson  
Mr William Irwin  
Mr Declan McAleer  
Miss Michelle McIlveen  
Mr Ian Milne

**Witnesses:**

Mr Matt Service	Agri-Food and Biosciences Institute
Mr Ian Humes	Department of Agriculture and Rural Development
Mr Mark McCaughan	Department of Agriculture and Rural Development

**The Chairperson:** I welcome Ian Humes; Mark McCaughan, grade 7 chief fisheries officer; and Matt Service, grade 7 principal scientific officer from the Agri-Food and Biosciences Institute (AFBI). You are very welcome to the Committee, as always.

Members have read your briefing paper, but I understand that you also intend to give us a verbal update on your recent meetings with the Strangford Lough Fishermen's Association. I ask you to be brief and concise in addressing the Committee and take no more than 10 minutes. I also remind members to keep their questions to two and to be short and concise. If we can, we will go round again. If we cannot, we will get the questions forwarded to them. Without further ado, Ian, carry on.

**Mr Ian Humes (Department of Agriculture and Rural Development):** Thank you, Chair. It is over a year since the Department sent the Commission a revised restoration plan for Strangford which had been discussed with the Ulster Wildlife Trust, the Department of the Environment (DOE) and others. That was in response to a pilot case taken by the Commission, which responded to a complaint from the Ulster Wildlife Trust. We have not yet heard formally from the Commission on whether it is happy with the plan; it is the nature of these things. But, we know informally that it is happy and that the Ulster Wildlife Trust is also content with the direction of travel. So, it is incumbent on us now, as Departments, to make sure that the restoration plan is put in place. It comprises elements of protection, through protecting areas from fishing and from disturbance from other sources, and intervention, and they are looking at the translocation of mussels from other parts to try to rebuild reefs. We also need to monitor that to make sure that our efforts are having any effect.

Modiolus is a slow-growing, long-lived animal, so it can take some years to establish whether you are having any success. However, with respect to what we have done, this Committee was involved with

the regulations that set up a no-fish zone in the lough, which was recommended in the Queen's University report and which the Commission had insisted that we did.

We have employed a Strangford lough fishery officer to monitor the fishery and make sure that the rules are being observed. I know that the DOE has also employed an individual to work as a Strangford lough ranger. Although intervention is more in the DOE's hands, it has also employed an individual to carry out the research and pilot studies needed to see whether translocation and other forms of intervention could help modiolus recovery.

This plan has meant, obviously, that there is less ground available for those who fish Strangford lough. We have been working with them to see what the impacts of that are and to look at what interventions are necessary there. That is the subject of a report prepared by Matt; he looked at the fishing that was going on in the lough and the impacts. I will ask him to talk about that.

To establish what we should now do, we need to know exactly what the impacts have been, what they have meant for fishing and the effects of that displacement. We need to know whether there is too much fishing going on in the lough for the ground that is left and, if so, we need to know what to do about that. We are going to have those discussions and gather our data. We have been gathering data on fishing activities over the past number of years. In 2008, there were some 3,000 pots being worked in the lough but by 2011 it was down to 1,500. Fishermen come and go; some are there for a long time and have been there for many years, while others come in, try a fishing opportunity and then go on to something else. We have been looking at all our sources of data to see how many people have been involved in fishing in the lough, and we have been looking at our records of changes in fishing patterns down through the years.

Matt's latest work looks at the impact of the change brought about by introducing the no-fish zones and what that means for displacement of the industry. I will ask Matt to say something about that study.

**Mr Matt Service (Agri-Food and Biosciences Institute):** We were asked to look at three things: the capacity of the lough to sustain pot fishing; the level of stocks in the lough, and the impacts of pot fishing on the sea bed. In the case of Strangford lough, that applied particularly to modiolus. With the Department of Agriculture and Rural Development (DARD) research support, we were looking at that and some of the other special areas of conservation (SAC) features around the coast in order to be better informed going forward.

We have no particular advice, other than the perceived impact of potting in the sea bed, which is that it is unsustainable in the lough. Our initial piece of work, as a proposal going forward, was to look at the amount of pot fishing in the lough based on our direct observations and the DARD returns on each type of substrate in the lough. At table 2 in our report you can see that, not surprisingly as you heard in the previous discussion, nephrops are found mainly on mud and the more mobile brown crab and velvet crab are much more spread.

Taking what we knew, prior to closure, of the amount of potting on each of the substrates, we used some of our own mapping data to calculate, pro rata, the potting among the remaining areas. That, initially, results in a net reduction of about 210 pots over the whole lough, which is about 15%, or slightly more than 1,400 pots. Ian said 1,500, but it fluctuates. We are working on the basis that potting will go down to just under 1,200 pots, split among a number of strings.

That is an opening point. We will have to work with DARD and the fishermen to look at how those numbers reflect their numbers. That may go up or down going forward. That is expressed in table 4 in the report. So, in essence, we might end up changing some of the numbers in the left hand side of table, which will be reflected in the pro rata calculations going forward. That will be accompanied by monitoring and a look at the levels of stocks and the impacts in conjunction with the Queen's University work project. So, there will be an ongoing review.

**Mr Humes:** I have alluded to changes in fishing levels over the years and, in the same period, the value of the fishery in Strangford lough has increased from £150,000 to £300,000. This is on the basis of information that we have had from fishermen on their catches in the lough. It is clearly not significant, when you compare it to some of the landings in our main ports, but, for the individuals involved in the fishery, it is a very important source of income, and we want to make sure that fishing is maintained in the lough.

I think that we are confident that we have a strong management plan in place and that we are moving in the right direction. We need to bring fishermen along with this and discuss various future management options with them. We will certainly work very much in partnership with fishermen to develop that. A small number of individuals are involved and we should be able to work out some sensible arrangements. However, at the end of the day, as in other places, we will have to ensure that there is a sustainable level of fishing effort on the stock available. Otherwise, we will run the risk of destroying that stock.

This is really where we are. As far as the management plan is concerned, Mark is responsible for making sure that, once we have set down a zone in which no fishing can happen, he can assure the Commission and others that that is the case. That is why he has a fisheries officer.

As part of our future plans, we intend to use the vessel monitoring system (VMS) on the fleet. This is done at a very precise level. We have a very complicated zone. The water is more than 10m deep, we have a contour and fishermen are not allowed inside that area. Obviously, it is not a nice, comfy square — it is a squiggly thing — but we have the technology and we can monitor whether fishing is happening in the area. Mark is looking at that for the future. It is essential, because if somebody comes along, stands on the shore, and sees a fishing boat, he or she could say that it should not be there when, actually, it should be, because the fisherman is not fishing in a banned area. We will know precisely whether a fisherman is fishing in a banned zone once we implement the technology along with the permit scheme.

**The Chairperson:** Will you tell us more about the interactions and meetings with fishermen? As you mentioned, Ian, it is vital that you bring everyone along with you in the management of the lough. We realise the issues and understand where we have had to go and the road we have travelled with regard to the complaint from Europe and the measures that we have had to put in place with exclusion zones and all that. However, looking to the future, to manage the lough we will have to bring everybody with us. There is a complaint from the fishermen. Where do we go from here? How do we bring them along?

**Mr Humes:** The Committee will have seen a letter that I and others received — it may also have been addressed to you, Chair — about the fishermen's particular concerns. Following receipt of that letter, we had a meeting with the fishermen and set out an action plan on a number of areas that we will look at. The last meeting that we had with that group was on 11 October, although a number of individuals were at the meeting to get life jackets rather than deal with the potting issue. I am not sure; I was not at that meeting.

Several structures are in place. First, we want to establish the Strangford lough fishery management partnership group that we talked about. We have had a couple of meetings with them since that letter. It will continue. We also have the work that Matt has done. It was presented to the group, and the group will consider it. The suggestion in that report is that areas are currently available but are not being fished. Fishermen will be able to tell us why that is the case. Maybe the areas will not be available. We have to have a dialogue with them. If we believe, as Matt's report says and according to the work that has been done, that there needs to be a slimming down of the fishing effort, we must look at how that can be achieved. We must consider the circumstances of a permit scheme, for example, allowing people to fish in the lough under specific conditions. We must also find out who has been fishing in the lough; that is important as well. As I have said, there has been lots of activity in the past and activity fluctuates. There are key questions, such as who will be entitled to a permit in future, and under what circumstances or conditions should we grant permits.

We will certainly be providing financial help. For example, we want to see more environmentally friendly fishing gear being used. We would like to be able to assist fishermen to replace their current gear. We have been talking about monitoring the fishery, the VMS and the technology, but that will be at no cost to fishermen. It is a part of monitoring and control, so we do not expect them to pay for any of that.

There is a range of actions on which we are moving forward. The report is with fishermen for comment and we hope to get some feedback on it. We will then develop a proposal about boat permits and conditions: how many there should be. Some questions that we have to answer at the outset are on things such as what happens if an individual decides to stop fishing, dies, or wants to retire and pass it on to a family member. What do we do in those circumstances? What will happen if the science indicates that we could fish 2,000 pots instead of 1,500? Would everyone get an extra 10, 20 or 30 pots? What happens if the science shows that there is too much fishing going on? Should we take out some permit holders who want to leave or should everybody experience a cut in the

number of pots they can fish? Those are the kinds of very difficult discussions that are ahead. From the outset, we have to work out a permit proposal. We will bring that to the fishermen after Christmas, I hope, and take it from there. However, our first step is to look at what the impacts would be of closing that large area to fishing. It looks like a large area, but the report suggests that the impacts on fishing are not as devastating as perhaps one would perceive, simply by looking at it on the map.

**The Chairperson:** I understand. We have talked about the relationship between you and the fisheries. What is your relationship like with the DOE? It obviously has a major say in all of this. Has there been friction or resistance in the past, maybe even up to the complaint? The Wildlife Trust would perhaps say — and I do not want to paraphrase or put words in people's mouths — that the DOE was not the problem; it was DARD, because DARD was protecting the fisheries before it was protecting the lough. How do you see your relationship with the DOE? How is that relationship going forward?

**Mr Humes:** We have a restoration plan which has been agreed by both Ministers, so there is a very clear way forward in this. I think that the problem in the past has been a lack of urgency in implementing the original restoration plan. We must not make that mistake again. We must move forward and implement the plan to the satisfaction of the Commission and others because there is going to be no second chance. We are not going to have a pilot case in the future. We must make serious attempts to restore modiolus and we are doing that.

There is a modiolus restoration plan steering group, on which are represented the DOE, DARD, AFBI, the Council for Nature Conservation and Countryside (CNCC), the Ulster Wildlife Trust and the fishermen. Also represented are Queen's University Belfast and the Strangford Lough and Lecale Partnership. So, all the stakeholders are looking at the way forward and are looking at the monitoring. We are overseeing what has been done on modiolus and we have an important part to play in dealing with and managing the fishing that is going on in the lough. I would say that the relationship is good; there is a common purpose; and we are moving forward with this as best we can.

**The Chairperson:** We understand the rationale and the reasons for the restoration plan. Do you monitor that and do you monitor the lack of activity, whether it be fishing or whatever? It is a fact that there are always going to be other factors impacting on the life of the horse mussel. Are you confident that we have structures in place to detect early the scenario being changed by conditions or other impending measures? Although the lack of activity and the restoration plan protect the horse mussel, they could have a negative impact on another species or something else in the water. Do you have an early alert system to monitor that if such a change were to occur, whatever it may be? I know that this is a very wide-ranging question, but I am worried that this will have an indirect impact on something else that was not foreseen and could have a detrimental effect on the life of the lough.

**Mr Humes:** There is a detailed scientific answer to this.

**Mr Service:** AFBI has two instrumented moorings in the lough: one at the head and one in the narrows. They constantly monitor water quality. As part of our programme of servicing the instruments, we always run down the body of the lough and sample water quality. So, water quality is constantly monitored. We monitor even some of the basic parameters, such as temperature and salinity, which you might see as being climate change indicators. You can access that data on the internet through the AFBI website. That is part of a joint programme between AFBI and the DOE.

We revisited some of our very high-resolution mapping in the lough over the past year. DARD, AFBI and the DOE funded some of that. That provides yet another baseline to measure change. Again, the DOE is monitoring certain seabed stations to a very high standard annually.

There are monitoring programmes in place. You will probably be aware that they are part of other projects that look into things such as the nitrates directive. The inputs to the lough are being assessed for agricultural pollutants, which have been flagged up in the past. The modiolus restoration group will have to bring all this into the pot. It would be inappropriate to constantly finger physical disturbance from fishing as being the main pressure. That would be incorrect.

**Mr Humes:** The forum for bringing that kind of information for evaluation and consideration is through the restoration plan steering group. Fishermen have wanted to bring a suggestion forward that it should look at the impacts of pots on modiolus reefs. There have been suggestions that modiolus has declined in places where there has not been any fishing activity whatsoever in the past. It is important to look at that also. The post-doctorate chap from, I think, America will be looking at the viability of

translocation. The outcome may be that the conditions are no longer right for thriving modiolus communities. That could be the conclusion from that process. All the available evidence is constantly monitored. There is an obligation to report progress to the Commission. So, a lot of work is being done, and a lot of areas of research are still to happen.

**Miss M McIlveen:** Thank you very much for your presentation. This seems to be a constituency day for me.

**Mr Byrne:** Enjoy it.

**Miss M McIlveen:** I certainly accept the rationale for the exclusion zones. However, the fact is that they came into force in January 2013. So, you are really talking about bringing forward proposals on permits etc after Christmas. We are nearly a year down the line, and there are fishermen who are now suffering financial hardship for a variety of reasons. How do you hope to alleviate the issues that they are facing with more immediate effect as opposed to much further down the line?

**Mr Humes:** We know the fishermen who are dependent on the lough, and when we have a discussion about this then, all of a sudden, there are lots of people who claim to have been involved in fishing in the lough. We have to get to the bottom of that. We also have to know how many people can be facilitated by what the lough has to offer — the so-called carrying or fishing capacity of the lough — and we need to make sure that the balance between the number of pots being fished and the number of fish and animals to be taken is right. This has taken a bit of time. We have made progress on a whole range of areas but we have not gotten to that point. We will get to it now, and we have begun a dialogue with fishermen. I would like to have done it earlier, but there have been a variety of competing priorities for us. We are a small outfit, and there has been common fisheries policy (CFP) reform, but we need to do it.

**Miss M McIlveen:** That is all very well, but, at the same time, you do have fishermen who have a livelihood that is being reduced, and their needs are not being addressed with any seeming urgency. There are concerns about that. There was a promise given to them in the Chamber that they would not be economically disadvantaged. Yet, they feel that they are —

**Mr Humes:** I am sorry. Who gave them that promise?

**Miss M McIlveen:** It was within the debate in the Assembly, which they refer back to, that they feel that they were given assurances that this would not impact on them directly in an economic way. Yet, to date, they do not have the permit scheme; it has not yet been consulted on. We also have fishermen who are, obviously, in vessels that are not appropriate for going into the Irish Sea. Those are much smaller vessels, and they have been alluded to in this report. There are issues for fishermen that they do not feel are being addressed by the Department with any real urgency.

**Mr Humes:** I think there are a couple of points. I think you were referring to Sam Cully's unfortunate incident. Thankfully, he survived. Claims have been made that it was as a result of imposing these fishing restrictions that he was forced to go outside the lough in an inappropriate boat. I know that there is other evidence that suggests that he was not entirely fishing in the lough prior to that and had been fishing out of Portavogie before that as well. I think that there would be a lot of claims and counter-claims made. What we need to do, and we are moving forward, is to find a fair system to ensure that the people who make a living from the lough can continue to do so and that there is a proper management structure.

As far as compensation, and so forth, is concerned, we need to look at a whole range of data to see whether claims are fair or spurious and how much fishing the lough can withstand. For example, if Matt's work came up with a number suggesting that, actually, modiolus are being displaced but that there are still plenty of fishing opportunities in the lough, we could just say, "Look, move fishing grounds."

**Miss M McIlveen:** It has also been suggested to me that there have not been enough discussions with the fishermen who actually fish the lough about collecting the data. Is that fair to say?

**Mr Humes:** Collecting the data about —

**Miss M McIlveen:** It is in relation to the recovery stocks in the lough.

**Mr Humes:** I know that we have consulted fishermen about fishing information. Matt has done many surveys of Strangford lough in the past that have involved consultations with fishermen about where they fish and so forth. If it were not for that knowledge and contact, he would not be able to produce a report such as that. I think that there has been dissatisfaction, naturally enough, with the outcome that led a large part of the lough being closed to fishing. I do not know whether there was any data that, had fisherman had it, would have made a difference to that.

**Miss M McIlveen:** The information that is being relayed to me is that they feel that the fisheries differ between seasons and that much of the data that has been collected has been based on a snapshot as opposed to being based on any prolonged piece of research, which would maybe give a different picture.

**Mr Humes:** I am always open to conversations with fishermen about that. Matt produced this report, which talks about the likely impacts of this, and he has suggested that there are a number of areas where fishing could happen. We can have that conversation with fishermen and they can say, "No, you are absolutely wrong, Matt, that it is not happening there because there are no fish". We will have those chats. He has also worked on the certain number of pots that are believed to be in an area. They may say, "Actually, you are not right about that. There are 12 pots on those strings and more pots in that area than you thought". So, if fishermen, having got this very comprehensive piece of work, believe that it is inaccurate, we can have that conversation to make sure that it is right. Maybe the impacts of this zone are bigger than we believe to be the case at the moment on the basis of the data and the evidence that we are going on. We brought it to the fishermen so that they could have a look at it and see what they thought. If you think that it is rubbish, we can have a discussion about that.

**Miss M McIlveen:** I am not necessarily saying that. I appreciate your comment that you are a small Department and that there are a lot of pressures on the work that you do. I suggest that it might be useful to try to forge a much closer relationship with the people who are immediately affected by this.

**Mr Service:** You are right. We have a limited number of scientists, observer trips and pot boats largely because the pot fishing surveys have been done as part of the wider pot fishing around the coast, so that effort has been spread thin. However, we have been working with DARD to ensure that we have some extra resources to do more surveys. I made it clear at a previous meeting that I want to meet the fishermen to look at the absolute numbers presented in this report to see whether we can ground-truth that a bit better. I am entirely open to that.

**Mr Humes:** We have heard several times today about not taking fishermen's input on board and wanting to have better science. When it comes to the inshore area, very clearly, we have a resource issue. If we are going to have better science in future, it has to involve cooperation and partnership with fishermen. They are well placed to collect data for us, and we wish in the future to ensure that we share that data with them so that they can understand some of the decisions that will be made about fisheries. We will have to look at different ways of doing that. Clearly, it is very expensive to send a scientist out on a boat, and there are only a certain number of boats that they can go on during the year. If you have fishermen who are collecting information on an ongoing basis in a reliable forum and it something that can be processed quite quickly, we will have a very valuable source that we can all work from. We can then understand the fisheries and what is happening better. That is something that we have to do in the inshore area, of which Strangford lough is a part. We have an inshore fisheries strategy and a desire to see better data and more involvement by fishermen in the collection of the data and the management decisions that are taken as a result. So, it is the way forward, and getting some of the technology on board some of these boats will help as well as we move forward.

**Mr Mark McCaughan (Department of Agriculture and Rural Development):** It is important that the Committee understands that we now have a permanent member of staff for Strangford lough. We have a Strangford lough fishery officer, who is every bit as much of the community down there as the fishermen. He will be our eyes and ears, and he will accurately be able to work out who is fishing what, where and when. We did not use any additional resource for this but shuffled our staff around to make it possible. In essence, it is to provide fishermen with the reassurance that we are taking their efforts seriously and recording their information accurately. It also allows us to show the Commission that we are taking their expectations seriously and can provide good data to show that in future. We have a full-time man at Strangford lough. So, any association with the dim and distance past where our fishing may have been under-recorded — do not forget that a lot of those vessels are so small that they are really below the radar with regard to recording fishing data — will not be the case in future.

**The Chairperson:** You made the point about the Strangford lough officer being your eyes and ears. Obviously he is the front line — the spearhead. It would have been good to have had him at this presentation so that we could meet him and hear about his experiences and interactions. He is going to be very important to interact with the fisheries. The next time that you are here, it might be an idea to bring him along — or her maybe. I was making an assumption.

**Mr McCaughan:** It is a he. Yes, that is noted, Chairman.

**Mr Byrne:** I want to ask about the restoration plan. Mussels are obviously important with regard to the functions that they carry out in filtering quantities of water. How much of that is going on at the moment, given that you have the ban on mussel farming and mussel fishing? What is the extent of the potting for lobsters, legal or illegal, that is going on and how much recording of that is being done?

**Mr McCaughan:** Matt, you might want to answer the question on the mussels filtering water.

**Mr Service:** Yes, that is a very sharp question. When the mussels were present prior to their decline, they were very significant filterers of the water. The body of the lough would probably have been filtered every two or three days. We have allowed for that in all our assessments by modelling the amount of food uptake by mussel filtration when factoring in the introduction of cultured shellfish to ensure that the food competition by cultured shellfish would not prevent there being enough food available for modiolus at their height. What probably realistically happens is that, as the modiolus have declined, other species, such as sea squirts, would replace some of that filtering activity, and we have some evidence of that.

**Mr Byrne:** What is the current state of the mussel population, given that there has been a ban on fishing?

**Mr Service:** The mussels —

**Mr Byrne:** How far have we advanced on the restoration plan? Is it 10%, 20% or 50%?

**Mr Service:** I think that we are static. This is largely based on the Queen's work, but the picture has changed. Since the reports of the early 2000s, there clearly has been a further decline in the northern basin of the lough, and the mussels in the southern basin — if you like, south of Long Sheelah, if you are familiar with the lough — have remained static in the past five years. There is some evidence of sporadic recruitment, but I do not think that there has been any increase in that area.

**Mr Byrne:** So, the restoration plan is not working.

**Mr Service:** It has not got any worse, and that is the best that we can say at the moment.

**Mr Byrne:** I asked a second question about lobster pots. How is that going and how well is it monitored?

**Mr McCaughan:** It is monitored quite well. We have our full-time member of staff. There are lobster landings in Strangford, but when I think about lobsters, I really think of the north coast. To answer your question specifically: pot fishing is recorded initially by the fishermen and there is enforcement in Strangford. There have been some significant enforcement results in Strangford.

**Mr Byrne:** I am not convinced of the integrity of the restoration plan. Is the plan meaningful or a token exercise?

**Mr McCaughan:** I had exactly the same discussion face-to-face with the Commission. We may be in a situation in which, biologically, modiolus have had their day in Strangford and are retreating north. They are what are called a boreal species; a northern-distributed species, and the further south they go, the less they like it.

We are still waiting to hear formally from the Commission. Informally, in face-to-face discussions, it said that, if we put our efforts into this restoration and are able to indicate biologically that modiolus cannot survive in Strangford lough, it is not a matter of infraction but a matter of biological change, but it is up to us to show that. No animal lasts forever. We never saw young modiolus in Strangford; they

are all old animals. There was evidence that the sequence of life for modiolus was not happening in Strangford, and there are very few are left.

We do need to focus on the interventions that are outlined in the restoration plan and monitor significantly to indicate whether these animals can survive there. As they are a designated species, we are required to attempt to restore them to conservation status. Results so far have been poor.

**The Chairperson:** Has the Commission talked to you about a timescale? When will the critical point come when decisions can or will be made on the real issue as you indicated, taking on board the lifespan of a horse mussel? Realistically, to get real scientific evidence, are we talking about one year, five years or 20 years? Do you have a timescale in your head?

**Mr McCaughan:** The discussions with the Commission have been formal and administrative. We have not really had technical or biological discussions with it about the detail of the anatomy and histology of modiolus. We have not had that experience with it. The Commission is responsive. It is not even doing its own analytical work. It is responding to a complaint along a set of guidelines. We have not had that discussion with it yet. It is up to us to demonstrate that we have a credible plan. The complainant and the Commission indicated that they are happy with that. If the plan gets results, the result will be, "Yes, you have been successful in your interventions", or, "No, you have not, for a number of reasons picked up by the monitoring". We do not know at this stage.

**The Chairperson:** You do not have a timescale for when you will have credible evidence.

**Mr McCaughan:** Well —

**The Chairperson:** You talked about the results being poor. I take it that those are the results of regeneration. However, if it is not the fisheries fault and it is global warming or some other factor, no matter what you do, it may not make a difference. Even though results are poor, in this case, if you get 10 years of poor results, it is not necessarily anybody's fault. Maybe nobody can be held accountable. How do we get to that point? Is there a point on that timeline when we can say, "Right, this is what we know"?

**Mr McCaughan:** We have to report to the Commission at various stages, which are detailed in our plan. Frankly, it would have been helpful if the Commission had confirmed that it was content with those arrangements, but we are pushing ahead on the basis of an informal arrangement. The monitoring that will be done scientifically will ensure that the Commission is always informed of what is happening and how it is happening. We go forward with the Commission hand in hand in this, and we have to have trust in its processes.

**The Chairperson:** What about Queen's or AFBI?

**Mr Service:** If there is no re-establishment of modiolus by natural spawning, something else is liable to take their place. There was a mention of sea squirts. Perhaps even Pacific oysters will occupy the niche. I think that that will happen five to 10 years down the line.

The other option in the armoury is to do some more active intervention. I know that Queen's is considering the possibility of moving modiolus from outside the lough into the lough. Of course, that carries the risk of destroying perfectly good modiolus beds somewhere else to put them into the lough, but they may not survive because we have not identified factors that are preventing their survival. So, that is a reasonably risky strategy, and we would need to be absolutely sure that there was some hope of success before I would be happy to go down that route. It seems perverse to me to destroy existing modiolus elsewhere.

**The Chairperson:** I understand.

**Mr Buchanan:** What about the infraction proceedings that were proposed by the EU? Are they simply being put on hold or have they been completely lifted?

**Mr McCaughan:** We have had a discussion with the Commission. We have written to the Commission and sent it our restoration plan. We have also had the complainant, the Ulster Wildlife Trust (UWT), write to the Commission to say that it is content with the plan. We have had face-to-face discussions with the Commission, which has said, "If the complainant is content, we are content, and

the pilot case will not advance". We have prompted the Commission, and we had DOE representatives speak to it again in August or September this year, and it still has not come back to us in writing. So, we are in limbo.

**The Chairperson:** OK. There are no further questions.

**Mr Byrne:** I have one, Chairman. Regarding the restoration plan, there is reference to resources being required. Has any quantification been done on the amount of money that will be required to make the restoration plan function and be relevant?

**Mr McCaughan:** At this stage, the majority of the financial burden is carried by DOE. It has a budget for the restoration plan and is carrying the cost of a contract with Queen's for the American postdoctoral scientists to lead the project. I am sorry, but I am not in a position to say what they have or what mechanism they have to acquire funding moving forward. If the research by the postdoctorates suggests that it is genetically safe to move modiolus from, say, Burial Island, north of Portavogie, into the lough to re-establish the modiolus community, that will take resource, but we have not had that discussion yet.

**Mr Byrne:** That begs a question, Chairman. We have a reference to a failure to fund and deliver implementation of the Strangford lough modiolus biogenic reef, DOE/DARD restoration plan. Are we falling into the classic example of limbo?

**Mr McCaughan:** No. If part of the project requires funding, that funding would be addressed by the normal bids system in the same way that the previous one was.

**Mr Byrne:** Has DARD made any bids?

**Mr McCaughan:** At this stage, Joe, it is not necessary. We do not have an upcoming financial burden. If that appears, bids will be made. I cannot say whether they will be by DARD or by DOE.

**Mr Humes:** Last year, we made a small bid for a craft to be deployed in the lough, but our Strangford lough officer has been put in place because of the redeployment of resources within fisheries division. So, there is no budget for this in the fisheries division, at the moment, and all our interventions are being met from within our own resources.

**Mr Byrne:** So, it is the human resource within the Department that is the problem. Is that right?

**Mr Humes:** Problem?

**Mr Byrne:** Is the issue the lack of a human resource.

**Mr Humes:** No. We have deployed a fisheries officer to focus on Strangford lough, as we said we would. That has happened.

**The Chairperson:** I know that you said that you are working in partnership with DOE, but is there a lead agency for the restoration plan? If so, who is it?

**Mr McCaughan:** The lead Department is DOE, and an individual in DOE marine division is the project lead.

**The Chairperson:** Do they work on it on a daily basis, along with your Strangford lough officer? What is the arrangement?

**Mr McCaughan:** DOE puts its own human resource into Strangford as well. It now has a Strangford lough ranger, who is a girl. She ensures that the DOE by-law on anchoring and mooring is upheld and does a good job speaking to the yachtsman. She is based in the Strangford Lough and Lecale Partnership office. The individual responsible for running the restoration project is a Queen's employee. He is in liaison with Joe Breen in DOE marine division, which leads the project on behalf of the Departments.

**Mr Byrne:** Chairman, I am concerned that it is down to one individual, be it the bionic man or woman, to get this restoration plan going. We are depending on a Queen's University student to take up the cudgels.

**The Chairperson:** You hear the Deputy Chairperson's concern about the potential for this not to be taken seriously, given that you have one or two people responsible for it. How do you answer and address that concern?

**Mr Humes:** We have a modiolus restoration plan steering group, involving DARD, DOE, CNCC, UWT and others, which monitors the progress that we make on the plan and looks at different initiatives and strands of research. Those environmental NGOs would not be on that group and remain quiet if government were foot-dragging. There is an earnest intent to make sure that the restoration plan is implemented fully and speedily. However, as you pointed out before, if the plan fails, it is not necessarily because it is flawed. The plan is the best that we can do in the circumstances to try to restore the modiolus populations, but there may be other circumstances that simply mean that you are battling against too strong a wind.

**The Chairperson:** OK. Joe, are you happy enough?

**Mr Byrne:** Yes, Chairman. That is enough for now. Thanks.

**The Chairperson:** OK. No other members want to come in. Thank you very much for your attendance here, your presentation and your answers.