HOUSE OF COMMONS

Environment, Food and Rural Affairs Committee

Oral evidence: Species reintroduction, HC 849

Tuesday 21 March 2023

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Watch the meeting

Members present: Sir Robert Goodwill (Chair); Ian Byrne; Rosie Duffield; Barry Gardiner; Dr Neil Hudson; Mrs Sheryll Murray; Julian Sturdy; Derek Thomas.

Questions 139 - 232

Witnesses

I: Dr Andy Clements, Chair, England Species Reintroduction Taskforce.

II: Tony Juniper, Chair, Natural England; John Holmes, Director, Strategy and Government Advice, Natural England.

Written evidence from witnesses:

– Natural England

Examination of witness

Witness: Dr Andy Clements.

Q139 **Chair:** Welcome to this meeting of the Environment, Food and Rural Affairs Committee, where we are continuing our inquiry into species reintroduction. In fact, the Committee comes hotfoot from Bavaria, where we spent a very interesting two days looking at the reintroduction of beavers and the experience they have had there. They have got up to 25,000 beavers, which has been a very successful reintroduction but, my goodness, some of the lessons learned are ones that we will need to apply here. We are very pleased that we have in the first session Dr Andy Clements OBE. If you would just like to briefly introduce yourself, then I will ask you a question.

Dr Clements: Good afternoon. I am really pleased to be here. I am here in my capacity as chair of the England Species Reintroduction Taskforce, which has been set up by Government over the last year. We are a new taskforce. We have met once so far and it feels like a privilege and an opportunity to come and talk to the Select Committee about the work of the taskforce.

Q140 **Chair:** What is your vision for the taskforce? Where would you like it to be in 12 months' time and in maybe five years' time?

Dr Clements: The vision is to realise the benefits of species conservation translocations, which is wider than species reintroduction, for nature and people, and to ensure that this mechanism of moving species around and reintroducing them contributes effectively to nature's recovery. At the moment, there is space for more evidence to support decisions about reintroductions and conservation translocations. The independent technical advisory group that this taskforce is brings together a range of expertise from lots of different disciplines to provide that advice and guidance, which is evidence-based.

Q141 **Chair:** Do you have plenty of plant as well as animal people? Animals tend to get the headlines, but obviously it is going to be plants, fungi, insects and other things.

Dr Clements: That is quite right, yes, Sir Robert. We have broad taxa expertise. In fact, our first meeting three weeks ago was at the Royal Botanic Gardens, Kew, and in the lunch break of that meeting we learned about the propagation and translocation of lady's slipper orchid, which is a very rare plant in Britain. Successful science and research is being done there to ensure that species can be translocated and to reduce the likelihood of it going extinct.

We do cover all of the taxa. As well as the broad range of taxa, we have a broad range of disciplines within the group. We have land management and land ownership represented. We have social science and environmental economic science, as well as what you might expect

traditionally, which is specialists who understand species and conservation.

Q142 **Chair:** Do you expect you will be producing a list of which species we should consider reintroducing, maybe what parts of the country that might be appropriate in and, more importantly, which we should not be introducing? Has Defra indicated that it would act on your recommendations, or will this be advice that it could ignore?

Dr Clements: The Government are always at liberty to ignore advice if they wish.

Q143 **Chair:** Even if it is good advice?

Dr Clements: Sometimes, but the work of this taskforce is very much to provide that evidence about species reintroductions and translocations. Initially, we will not be providing a list of species that should be and should not be reintroduced or translocated. At the moment, within England, a large proportion of species reintroductions can take place without regulation. What we require is for those reintroductions and translocations to be done in the best way possible. There is already guidance available for that, both guidance produced within England, which is called the code, and guidance produced internationally by IUCN.

One of the main functions at the beginning of the taskforce's life is to ensure that those who come forward with proposals to reintroduce or move species do so in a way that adheres as best they can to the guidance.

Q144 **Barry Gardiner:** You crept in under the line, did you not?

Dr Clements: What do you mean by that, Barry?

Barry Gardiner: You published these terms of reference this morning.

Dr Clements: That was very fortunate.

Q145 **Barry Gardiner:** You were established in 2021 and you put these out this morning. I have to say that it is the thinnest document I have ever seen. "Ensure conservation translocations are aligned with best practice". Well, whoop-de-doo, I did not expect it to say anything but. "Establish and work with the stakeholder forum". Yes, well. All of these things are the pretty bloody obvious, are they not? It is just about a page of your aims and deliverables, and two pages of the process—the decision-making process, the secrecy you have to observe, the audiences, the membership, the budget. Is this not an embarrassment?

Dr Clements: I do not think so. The terms of reference to which you are referring ought to be a succinct document that outlines the measures and the objectives of the taskforce.

To answer the first part of your question about creeping under the line, to use your term, there may have been an idea that the taskforce would be created in 2021. I was appointed only in September 2022. I was

appointed in the knowledge that I was away for much of the winter and that the first meeting of the taskforce could take place as soon as I returned in February, which it did. There was some hard work undertaken by a secretariat and by Defra to ensure that we had the right membership, to which I had an input. All of that took place during the winter and we did very well to get the first meeting done and dusted in February.

Regarding the website, we have been pushing very hard for some weeks following the first meeting to ensure that the terms of reference, the membership and the minutes of the first meeting could be available. I really wanted them available for today, so that we would be able to talk about the terms of reference, and we managed to do that. My view about the timing is a robust view that we have done as much as we can, as quickly as we can. We have got them ready for today, and I am very pleased about that.

Regarding the content of the terms of reference, I have chaired a number of things, both for the Government and for the voluntary sector. We can get bound up in very long and detailed terms of reference. One of the things that document does is set out very clearly the prominent and main reason for having a taskforce, which is to provide evidence that informs decisions by others. That is very clear in those terms of reference.

Q146 **Barry Gardiner:** That is one of the things that are of concern, though, to a number of organisations that we have spoken to already—that it is just providing advice. "Taskforce" rather suggests something a bit more than just providing advice.

In here, maybe I have missed it, but one thing that was impressed on us in our peregrinations in Bavaria was that this is about managing human beings as much as it is about managing species that are being relocated and reintroduced. The whole issue of pest control and human-species conflict does not seem to be mentioned in the terms of reference as such. Because they are so broad, it may well be that they can be included but, certainly reading this, anybody reading it would say, "Is that not obvious?" rather than, "Yes, okay, that will be interesting". Do you see where I am heading?

Can I just say, Dr Clements, I am hugely in favour of translocations and re-establishing various species? I can see the huge benefit that it can bring to our natural environment here and to our economy. It is really important to stress both, but I am just surprised that this is as thin as it is.

Dr Clements: You also asked a question about why it is called a taskforce, in that that presupposes that it ought to be more action-oriented. That is fair point. Of course, one of the things that we have been learning as a very young organisation, a very young mechanism, is from what has been going on in Scotland, because the equivalent body in

Scotland has been around for nearly a decade and it is called a forum. Of course, that is a much more comfortable name.

Q147 **Chair:** It is a talking shop forum, is it not, really?

Dr Clements: If you looked at the record of what the Scottish forum has achieved, you would not say it was a talking shop at all. That is the model that I would like the taskforce to follow. Nothing in those terms of reference means that we cannot do that.

I go back to my original point and I would make it again. The key added value of the taskforce is to provide evidence into a very complex and quite disparate discussion about reintroductions and translocations. On the one hand, there are megafauna that we all know are controversial in terms of what people think about their reintroduction. On the other hand, there are a huge range of taxa, both plant and animal, that creep under the wire, to use your term, actually. We need some help from those who understand the evidence in this space to enable some strategy or some plan to come forward about reintroductions on a much wider scale.

Q148 **Barry Gardiner:** Let me press you on bringing forward that evidence, because one of the criticisms that we have heard is that the taskforce is a Defra body. Your budget is determined by Defra. There will be at least one representative employed by Defra sitting on it. There is a concern that it will be almost telling Defra what it wants to hear, rather than providing genuinely independent advice that Defra might find uncomfortable to have to listen to.

Dr Clements: On the question of independence, there are many around who would understand my reputation as somebody who has worked for a very long time, both within the Government community and outside it, and that I hold independence very dear. A recent example within the Government community is to chair the Natural England science advisory committee, which is a group of 15 independent academic scientists, whose job is to challenge, scrutinise and support the science of Natural England. You can ask the next person who is giving evidence today whether they think that my independence as that chair is well delivered.

The other thing about the work I do is that I am passionate about evidence-led, evidence-based conservation. When I was in the non-governmental sector as chief executive of the British Trust for Ornithology, there were many times when charting an independent path between maybe two opposing views, or a Government view and an NGO view, was something that I did. I will continue to do so as the independent chair of this independent taskforce.

Q149 **Barry Gardiner:** Please, I am absolutely confident in your own integrity and independence in that respect. Perhaps you could outline for the committee what sort of thing, for you as chair of the taskforce, would be a red line for Defra to cross in terms of your independence.

Dr Clements: Like I said before, if you are an independent advisory group, the important thing is to offer advice and to offer the best evidence into decision making, but it is not for the taskforce to necessarily determine what the Government should and should not do. It would be a red line for me if, after a term of three years or approaching a term of three years, every bit of advice that we had offered the Government had been ignored, but I am confident that would not happen, because my experience tells me that this is a process of swings and roundabouts. You win some and you lose some. It does not take away any of the importance of offering the very best evidence you can to try to inform those decisions.

Q150 **Barry Gardiner:** Finally, do you see the taskforce as focusing on Defra or as focusing its advice, its evidence, more into public engagement and the education of stakeholders?

Dr Clements: That is a really powerful question. The way the taskforce faces is many and varied, and of course Defra and the Government are an important stakeholder, but so is the conservation community; so is the landowning and land management community; so is the public. I say in my written evidence that one of the wonderful things about conservation, translocations and species reintroductions is that, if they are done well and the community are behind them, they are a wonderful advertisement for getting the public involved in broader nature conservation and understanding it.

Q151 **Mrs Murray:** Could I please ask you, Andy, what you have done to reach out to key organisations and individuals about the taskforce? Are they supportive?

Dr Clements: When the taskforce was created, the membership was drawn from a range of stakeholder organisations. There are a number of environmental NGOs represented. There are statutory bodies—the Forestry Commission and Forestry England for example—landowners and land managers, and independent academics who have specialisms in the area. That was the first thing we did to reach out because, in conversation with the Government, the vision was that we would have an expert technical group.

Subsequent to that, we are going to draw together a broader stakeholder group. That will involve as many of the stakeholders and operatives in this area as possible. We have not started to do that yet. It is the subject of our second meeting. The first meeting of the taskforce was to introduce everybody to one another, make sure we understood and underlined the terms of reference of the taskforce, and make sure everybody understood and had a collective view of that. Subsequently, we will spend some time at the next meeting—and the taskforce has gone away to do some work in advance of that—on creating the stakeholder forum.

At the moment, I imagine the stakeholder forum will meet a couple of times a year, just to get some momentum behind a wider support for the taskforce. It has come in for some criticism in the early days. I listened to the evidence session that you had two or three weeks ago, where I could hear criticism both from the NFU and from the Wildlife Trusts. We will be talking to both of those. In fact, I followed up that evidence session and reached out to the chief executive of the Kent Wildlife Trust, and I am going to see the bison reintroduction proposals that they have got going in Kent. It is early days, but our intention is to reach out far and wide.

Q152 **Mrs Murray:** Could I just ask you to basically say what your day-to-day working relationship is with Natural England and Defra? Do you take advice from Natural England and share information and resources?

Dr Clements: The working lines are that, as chair, I work to Edward Barker, who is director of natural environment, trees and landscape at Defra. Just to correct one of the things that Barry said earlier, the Defra person on the taskforce is not a member of the taskforce. They are an observer. We have then a secretariat, provided by Natural England. That is Simon Lee. We have one professional, the principal species adviser from Natural England, Delphine Pouget, who is sitting behind me at the moment. She is the Natural England member of the taskforce.

Naturally, we do share expertise and knowledge, because there is a huge range of expertise and knowledge within Natural England about species recovery more generally, part of which is species reintroductions, and a lot of expertise and experience that is invaluable to the taskforce.

Q153 **Mrs Murray:** Who has the final say if you disagree with Natural England?

Dr Clements: That is where my independence comes into play. It would be unusual, perhaps, to disagree with Natural England but not impossible. My independence and the independence of the taskforce is the most important thing. We will continue to offer our advice as best we can, making sure it is as close to the evidence as it can be. We will live and die by it.

Q154 **Mrs Murray:** Finally, are there any lessons to be learned from how the equivalent Scottish National Species Reintroduction Forum operates?

Dr Clements: Yes, very much so. I said in the introductory period that the model in Scotland is a very strong one. The other day I had a conversation online with Martin Gaywood, who is very important in the Scottish forum. We have agreed to exchange experience and expertise. In fact, I will be attending the next meeting of the Scottish forum as an observer. Incidentally, Martin Gaywood is the main editor of this brand new book, which came out in January this year, which covers all the scientific work and evidence around conservation translocations.

Chair: I notice there is a white-tailed sea eagle on the cover of that book.

Dr Clements: There is.

Q155 **Chair:** I have talked to a Scottish landowner recently who is very upset that the two pairs of golden eagles on his land have been displaced. They have moved away because of the white-tailed sea eagle. It is quite a complex issue. It is not just about taking land; it is about other wildlife being impacted as well.

Dr Clements: Very much so.

Chair: That is going to be my Easter reading, that book, so thank you.

Q156 **Ian Byrne:** This is just on the membership really, Andy. How was the membership of the taskforce chosen? Did you have a say as chair, even informally?

Dr Clements: The membership of the taskforce was chosen around September, soon after I was appointed. There was agreement between me, Defra and Natural England that this should be a specialist technical advisory group. We needed to approach organisations, landowners and land management, and academics, as to whether they wished to be part of that.

Certainly regarding the academics, we were able to target particular individuals who we thought would be able to bring the necessary expertise. One of them, John Ewen, for example, is another editor of this book. He works at the Zoological Society of London. He is active in international translocations in New Zealand, and has been for a very long time. I did not want to miss the opportunity to gain that expertise into the taskforce, and we have been very lucky to be able to get his expertise there too.

I had a say in the taskforce membership. For organisations like the environmental NGOs, the Nature Friendly Farming Network, landowners and land management, we approached people to see if they would be willing to serve. We have Jake Fiennes from Holkham, and Martin Lines, chair of the Nature Friendly Farming Network. It was a combination of asking organisations whether they wanted to be involved and who they would send to it.

Q157 **Ian Byrne:** What was the remit around the organisations that were asked? What did you aspire to have on your committee? How did you set the parameters?

Dr Clements: It was a range of taxa-knowledgeable nature conservation organisations, for example the Wildfowl and Wetlands Trust. If we think about curlews, a rapidly declining bird, and looking after curlews across the UK, there are conservation translocation interventions that enable us to look after or aim to look after the conservation of curlews. The Wildfowl and Wetlands Trust has particular expertise in taking eggs or chicks from the wild and rearing them in captivity. It is called head starting, so that the birds can then be released at an older age when they

are not as vulnerable as they would have been in the wild. Being able to get that particular expertise on to the taskforce was very important. That drove our look to those organisations.

As Sir Robert said right at the beginning, people tend to often overlook insects and invertebrates. We have somebody from Buglife, who was an academic scientist previous to the work they are doing there. Given it is a small technical advisory group, getting as broad a range of expertise as we could felt important at the start of this.

Q158 **Ian Byrne:** When we took some of the previous evidence sessions on this, Rewilding Britain told us it was concerned that the taskforce was heavily weighted towards academics. How would you respond to those concerns that the panel membership is not broad enough? Professor Driver said he was concerned that there were not enough people with hands-on experience who got their hands dirty, and instead it was focused on academia. How would you respond to that?

Dr Clements: Yes, it is unfortunate really. I spoke to Alastair Driver afterwards. It was a shame that neither the membership nor the terms of reference were available for your previous evidence session. I was disappointed by that. In fact, I had not been asked to give evidence here. The knowledge that the Committee and the witnesses on that session had at that stage could have been better, and I wish it had been. Alastair Driver was much more comfortable when we had a conversation and I talked about the nature of the membership of the taskforce.

Q159 **Ian Byrne:** That was key. What Barry touched on before with regards to coming back from the trip over the weekend was about people management. It was about engagement. It was people feeling invested in. That is really crucial with this and what you are going to do. That has to happen, does it not?

Dr Clements: It absolutely does. Again, that was a very powerful point of the first meeting being at Royal Botanic Gardens, Kew. Not only are these people specialists in their particular area of evidence and science, but many of them are very comfortable in taking that message out to the public, talking to communities, getting people onside, that kind of thing.

Q160 **Chair:** Were there any individuals who declined your invitation? If so, are there any gaps that you might want to fill in the future in terms of expertise or international experience, even?

Dr Clements: To my knowledge, there were not any organisations or individuals that declined. That is not to say that in the future we will not be able to look at gaps and also fill those gaps. There is an opportunity in the terms of reference to co-opt particular expertise for particular discussions that we might want to have.

Q161 **Chair:** You can always call witnesses or even travel, as we have, to see things in the field and some of the implications and learn lessons.

Dr Clements: I am really looking forward to seeing things in the field a bit more. I have a little bit of experience of conservation translocations myself. I was one of the first English Nature people in the early 1990s to go and collect red kites from Spain. Many of the Committee may well know the success of the reintroduction or translocation of red kites around the UK and the benefits that has brought to many, many people. Many communities love seeing red kites. If you go shopping in Gateshead, in the big Gateshead shopping centre, the shoppers can watch red kites in the sky there. That is a wonderful success story, is it not?

Chair: Yes, we went to Dorneywood, the Chancellor's grace and favour home, and we spent the whole afternoon watching the red kites circling over there. It was an amazing sight.

Barry Gardiner: No work done there, Chair.

Chair: As well as drinking George Osborne's champagne, it has to be said.

Dr Clements: One of the really important aspects of that particular reintroduction, and one of the measures of its success, is that the UK is now exporting red kite chicks back to Spain, because the Spanish population is declining. It just demonstrates the importance of this mechanism as a conservation mechanism, even at the international scale.

Chair: I must stress, it was primarily a social event, although we did not play croquet as Lord Prescott did at a similar event.

Q162 **Rosie Duffield:** Can you tell us what the funding is for the taskforce for this financial year and whether that is sufficient for it to effectively fulfil its function?

Dr Clements: At the moment, we have a small funding pot from Defra, which for the coming year, because we have only just started, as I understand it, is around £50,000. In my mind, that is very helpful, but I suspect we will need more for our work. In a number of these areas that we will be investigating and where the evidence base needs building, we will need to commission research to enable that to happen. That is often expensive and I would be putting pressure on Defra, in the best way I can, to ensure that the taskforce is properly funded.

Q163 **Rosie Duffield:** That is £50,000 for everything, including research.

Dr Clements: Yes.

Q164 **Rosie Duffield:** Thank you. Are you and the members of the taskforce paid to work a certain number of days?

Dr Clements: As the chair, I am paid for 15 days a year. The rest of the taskforce are paid expenses for joining meetings and so forth.

Q165 **Rosie Duffield:** You expect to do 15 days a year. What happens if you think, "This just is not working; I need to do double that", or half that, or

something?

Dr Clements: I have experience of being on the board of Natural England, where I am paid for three days a month, and if I only worked three days a month we would not get much done. It is not very much, 15 days a year, but initially we will see how much I have to work.

Q166 **Rosie Duffield:** It is trial and error.

Dr Clements: A little bit, yes. If I found I was working double, I would be asking Defra to fund that a bit more. I have been a passionate scientist for nature conservation all my working life, and I am not going to stop being that now.

Q167 **Rosie Duffield:** As well, if you found something that you thought really needed some serious investigation, you would feel okay about asking them to fund that.

Dr Clements: Yes, definitely. The other point is, of course, as I mentioned earlier, that Natural England has a lot of expertise and knowledge in this space. I imagine that the taskforce will, on occasion, collaborate with that Natural England expertise to get work done. It is not all about us doing it on our own.

Q168 **Chair:** You probably spotted at the NFU conference in January when the Secretary of State, Thérèse Coffey, announced, "I won't be supporting reintroduction of species like lynx or wolves. We just don't need to and we won't do". Were you consulted prior to that announcement being made?

Dr Clements: No.

Q169 **Chair:** Do you think it is appropriate for the Secretary of State to be making these comments without consulting the taskforce or looking at the evidence, or is she being advised somewhere else?

Dr Clements: I do not know if she is being advised somewhere else. For me, it is important that the taskforce is able to provide evidence, as you rightly ask there, into that space. It is an unusual statement, certainly, not least because the issues facing decisions about wolves and lynx are very different, depending on which of those two species you are talking about. It may be the case that that was the Secretary of State's view at that time. What we will do as a taskforce, in any event, is go away and ensure the evidence is more widely available and understood that helps decisions to be made, rather than statements at things like conferences, about whether lynx and wolf are considered for reintroduction or translocation in the future.

You asked at the evidence session previously about this, Sir Robert. You asked something like, "Does that mean that those two species are off the list that the taskforce can consider?" or words like that. The answer to that is no. We will continue to provide evidence into that space. It is very important, and we can learn a lot of that from Scotland and with

Scotland. They are further ahead in considering both of those species than we are in England so far. It is very clear that there will be a set of conditions within England that need to be listened to and understood as we prepare the evidence for or against those particular reintroductions.

It is tempting to consider, and the public might consider, for example, that species reintroductions are all about these controversial megafauna. We touched on this earlier. As you have heard previously and I would reiterate, the vast number of species—plant, animal and lots of invertebrates—can be reintroduced adhering to the guidance and the guidelines as much as possible, in the best way possible, with community support, and they are not controversial at all.

We saw a very good example in Rockingham Forest, where the chequered skipper butterfly has been reintroduced to Fineshade Wood. Nearby is another wood, Collyweston Great Wood, where the habitat work that has been done in order to encourage that butterfly to move from one to the other is hugely beneficial for wider nature recovery objectives. It is not a controversial species by any stretch of the imagination. Focusing on its reintroduction has ensured that other communities and other interests do habitat work that benefits that species and other species too.

Q170 **Chair:** I suppose, it is fair to say, in the UK we are fortunate in having the English Channel, which has prevented other invasions historically, whereas the evidence we heard in Bavaria was that some species were coming in across the border from places like the Czech Republic. They had had a bear, wolves and lynx. It was interesting that they said, "You would be very unlikely to see a lynx". They have the same problems as us with large numbers of roe deer, which are affecting their forest industry. Do you think there could be locations, maybe such as Kielder, where lynx could actually play a part in improving the management of our forestry?

Dr Clements: I would really like to look at the evidence about that in the taskforce. Definitely, it is worth looking at. I agree with you that lynx, being an ambush predator, being secretive and liking woodlands and scrub, could be an effective controller of non-native deer, not only roe deer but muntjacs. If you think about the south of England, we have a huge problem in terms of maintaining the quality of our woodlands because of non-native invasive species like muntjac.

Q171 **Chair:** Would you say that, despite what the Secretary of State has said, you might still be looking, with these two particular species, to see whether more evidence could help her reconsider or possibly, if the evidence supports what she said, confirm that situation?

Dr Clements: In due course, the taskforce will look at evidence around both lynx and wolf. We are not ruling anything out.

Chair: Could I just ask about the risk? I know Neil Hudson mentioned this earlier when we were discussing what we were going to ask. Wild

boar is critical in Europe in spreading African swine fever.

Q172 **Dr Hudson:** Do you want me to ask it? Apologies for coming back in; I have just been on another Committee. I just wanted to follow up from the Chair in terms of risk awareness and management when species are potentially reintroduced or introduced into our country. The Chair mentioned African swine fever in the wild boar population. Do you feel, Dr Clements and your group, that enough work is being done on the potential risks of species introductions or species reintroductions from known pathogens, such as African swine fever, but potentially hitherto unknown pathogens?

If a group of animals comes in, we are an island, effectively, so in terms of our biosecurity it is so important for the national population of animals, potentially for plants as well if the species are brought in, but also for the potential zoonotic implications. Is that very much on your radar of the potential risks and possible unintended consequences of species introduction into our country?

Dr Clements: Certainly, yes, and both of those things are well represented in the IUCN international guidelines and in the England code. That is the first place where we can gain some support from what is written. The taskforce, as I said in my written evidence, is very much about understanding risk and benefit. It is not just one-way, to champion the species reintroductions. It will do that where it thinks that species reintroductions or translocations are beneficial, both to the species concerned and, very importantly, to wider nature recovery. That is the key thing about this. It is a mechanism, one of many mechanisms that will assist us in recovering nature, but understanding the risk is very important.

I would not want the risk of something like swine fever in the wild boar population to be considered out of proportion to other biosecurity risks that are prevalent or evident in biodiversity and in stock in the UK. At the moment we have highly pathogenic avian flu rife across birds, and yet we continue to release millions and millions of pheasants into the wild every year. We do not know the extent to which those birds are carrying the pathogen or even vectors for the disease. The taskforce will always aim to be proportionate in its consideration of risk and proportionate in its consideration of the benefit of doing translocations.

Q173 **Dr Hudson:** I take your point about avian influenza, but we know that it is almost endemic now in the wild bird population and the migratory birds coming in. We cannot control that. I just wanted to get reassurance from you that the taskforce is doing bodies of work to actually quantify or predict the risks in case something comes in. We know what happened to the red squirrel population over the last 150 years with the greys coming in and squirrelpox virus. That was not something that was intended or potentially predicted. We have to be very conscious of biosecurity, do we not?

Dr Clements: We definitely do. It may well be that those things, that example, would not have happened had we had a dedicated species translocations taskforce in play at the time to consider those risks.

Q174 **Julian Sturdy:** Neil has asked half the question I was going to ask, but, Dr Clements, following on from that, I just want to drill down a little bit more. You have talked about the proportionality of the taskforce, but I want to drill down a little bit more on the processes you would actually go through to identify risk and benefit. Maybe I have missed that, but I have not really heard that yet. If that was touched on before I came in, I apologise. I just want to try to drill down on that.

Dr Hudson has raised a couple of good examples. You have talked about the red kite example and obviously that is a huge success. I am a Yorkshire MP and am close to Harewood, so have seen the huge success of the red kite population after its released around Harewood. It has been, as you rightly say, a huge success, but at the time it was slightly controversial, if I remember going back. We have talked about wolves and lynx. They naturally will be controversial. Could you just outline the processes that the taskforce would go through when looking at these species?

Dr Clements: If we are looking at a species that has not been reintroduced or translocated to date, we would certainly advocate the use of the IUCN guidelines and the code as the first place to go, which outlines a huge range of the processes that lead to successful translocations and reintroductions. If there was a likelihood or even a possibility of there being a risk of introducing a pathogen, we might well co-opt on to the taskforce somebody who understood the nature of that sort of thing and how to assess the likelihood of it, in order to provide advice about that.

It is not necessarily for the taskforce to say yes or no to a particular reintroduction or translocation. There are others who can do that through licensing and other regulation. We would work with those parts of the conservation community to ensure that the understanding of risk is where it needs to be with a particular species reintroduction.

I would go back to what I have said earlier. The number of species where the risk is high will be very low. Reintroducing species that are noncontentious, small insects or other invertebrates, or moving them to new parts of the range within the UK, are going to be very, very important for the work of the taskforce. I do not want to underestimate or give the impression that we are saying the risk is too small, but I also want to be sure that we are balancing risk and benefit appropriately.

Q175 **Chair:** Finally, a few eyebrows were raised in September when no general licence was issued for the control of beaver. Some landowners were quite concerned that, if beaver were to come on to their land, they would have no opportunity to control them, even if they were causing quite severe damage. Would you see part of your role as looking at what

level of protection some of these species should be given? You might have one landowner very enthusiastic about a species, but his next-door neighbour might be less so and would be concerned that his neighbour's new species might cause him problems, certainly looking at things like sugar beet and maize, which beavers are very keen to gorge themselves on.

Dr Clements: As are pink-footed geese. It is a very important point, actually. We will look to make that evidence available. In fact, today I notice on social media a paper has been published called *Learning to Live with Reintroduced Species: Beaver*. It is a restoration ecology paper. That is the kind of evidence that we will be able to marshal and use, working with communities such as landowners, to ensure that post-release management, if I can call it that, of some species that may impact particular communities can best be dealt with.

It was quite interesting actually. There is also a podcast called "The Lodge Cast", which I saw on social media today, with Clinton Devon Estates. One of the things the guy there said was that the only part of the farm growing grass this dry summer was the part inhabited by beavers. You are absolutely right that it is okay for some farmers, but it might not be okay for others.

Q176 **Chair:** We saw a lodge yesterday where the farmers were controlling the height, because if it was at the optimum height it did hold the water back. Of course, if it got too big it actually flooded the farmer's field, but under the current legislation you would need a licence to even touch that lodge, even to maintain the height of one which everyone agrees would be a sensible height to have.

Dr Clements: The taskforce would offer evidence into that space, but it is for the licensing authority to determine whether there should be a change in that regulation or policy.

Q177 **Chair:** Would you be able to commission original research of any sort?

Dr Clements: Yes.

Q178 **Chair:** Will that be paid for by Defra? Have they given you any assurances?

Dr Clements: At the moment, yes, but also it is important that it will be collaborative. I have not said much about collaborative working and partnership. That is another thing that always delivers better than trying to do something on your own. Particularly these days, if you look at scientific papers, they are very collaborative in terms of the organisations and the institutions that work together to further their scientific research. The taskforce will be able to do that too.

Q179 **Chair:** Thank you very much indeed. You have given very concise and informative answers, so thank you.

Examination of witnesses

Witnesses: Tony Juniper and John Holmes.

Q180 **Chair:** We are delighted to have Dr Tony Juniper, an old friend of this Committee, and John Holmes. Would you like to introduce yourselves and your role? We will then ask you some questions.

Tony Juniper: My name is Tony Juniper. It is my privilege to be the chair of Natural England. I am delighted today to be joined by John Holmes. John, what is your title?

John Holmes: I am strategy director and I lead a variety of teams that advise on conservation methods and techniques, including species conservation.

Q181 **Chair:** Tony, I suppose this would be the first question. What are your thoughts on the need for a species reintroduction taskforce? Do we not have enough on, saving the species that we have already, without introducing more?

Tony Juniper: It has been a widely repeated fact that the United Kingdom is one of the most nature-depleted countries in the world. If you look at the status of species here over time, the sad truth is that we have lost about 400 species that have become extinct in Britain over the last 200 years or so. If you go back further, it is many more. That, of course, would include the lynx, the wolf and the beaver, among others, which went long before 200 years ago.

We are a depleted country and, if we wish to restore and recover nature, which is now a high-profile, explicit Government aim, with many targets and, indeed, now legislation behind it, plus a very good 25-year environment plan, we need to restore some of the fabric of our natural environment. That includes augmenting the populations of some species that have declined and bringing back some that have disappeared altogether.

Happily, extinction in the British isles has not been accompanied, in many cases, by global extinction, so we do have opportunities to bring back species that were here and to re-establish that web of life. You very often have the impression that biodiversity is about a collection of species. It is, but it is also, critically, about the connections between and the roles played by those different species. Certainly in this country, the absence of creatures like the beaver, which have a catalytic role in how ecosystems work, has hastened the loss of biodiversity more broadly.

It is an important part of what we must do to be able to achieve our nature recovery goals going forward, and we are absolutely delighted at Natural England to now have the partnership opportunity to work with the taskforce in order to build the momentum on this particular aspect of nature recovery. This is about a whole range of aspects, and the reintroduction and augmentation of populations is but one. It needs to be

deployed alongside all the others and in a coherent way, which, hopefully, is something that we can help to do as the Government's adviser at Natural England.

Q182 **Chair:** You were sitting at the back during the last evidence session. Were there any aspects of Andy Clements's evidence that you would take issue or disagree with?

Tony Juniper: No, certainly not. I was delighted to hear Andy speaking about the work of the taskforce. It is only recently formed and had its first meeting last month, and so hearing about the momentum that is being built and the ambition that he has was really very welcome. I have nothing to add on that.

Q183 **Chair:** I know it is early days, but have you any thoughts on what more they could do and how their role could be enhanced?

Tony Juniper: One thing that is evident is the enormous interest that is now being attached to how we can rebuild and recover species populations. What will happen over time is that the very existence of the taskforce will galvanise more discussion and more partnerships. The very fact of it being a focal point for science and evidence will really lift up the energy on all of this. Over a few years, we will see quite a lot more activity on all of this, which is exactly what Government intended when Ministers set up the taskforce.

Indeed, I recall, when the group was being established in May 2021, the enormous ambition and enthusiasm that Ministers put behind it. This goes back to the point being made about why it was called a taskforce. It was very much about action and about doing things, and that is why Ministers put such a lot of weight behind that name.

Q184 **Chair:** You mentioned reintroducing species that we have lost. As the climate warms, would there be an increasing role for species that have never lived here but maybe could live here? Some birds are making that decision without our intervention.

Tony Juniper: Mobile species that can fly and those that can be carried on spores or tiny seeds may come without any assistance from us. One area where there is a lot of activity in looking at the effects of climate change in the future is in relation to tree planting. The Forestry Commission is looking at bringing in species that are non-native to these islands, deliberately, to anticipate the effects of global warming.

This raises another set of other questions. I am struck today by the extent to which the conversation is raising risks about the reintroduction of once native species that are gone, whereas we tend to tolerate quite a lot of risk when it comes to bringing in species that were never native to these islands. I do hope that there will be quite a high level of scrutiny about non-native tree species being brought here, when, in fact, an alternative strategy might be to go to southern Europe, look for seeds of oaks, hornbeams and others that can already be adapted to those higher

temperatures, and bring those over, rather than exotic species.

Chair: Nobody is shooting the parakeets in Battersea Park, are they?

Tony Juniper: The peregrines seem to have taken a liking to those, so maybe that particular apex predator will do us a favour there.

John Holmes: In answer to your question about what the place might be for assisted colonisation, we are in the very early days of understanding the need for that in the face of climate change. We know that many species—plant species in particular—move more slowly. To meet the Government's targets, species reintroduction is going to be not the only but an essential component in turning around species decline. Developing that practice, in terms of what is right to do and how you might assess the costs and benefits, will be an important role for that committee.

Q185 **Chair:** There are certainly some big gaps left by elms and ashes, which are indeed dying, and also some other rather worrying tree diseases that are spreading.

Tony Juniper: Exactly, and this goes to the earlier question about importing diseases, which have been a massive hazard to our native trees, such as sudden oak death, the Chalara fungus that affects ash trees, and Dutch elm, which was the first large one. The movement of trees and pathogens with them across borders is a major issue.

Q186 **Mrs Murray:** Is the taskforce sufficiently independent?

Tony Juniper: Having had the pleasure to work with Dr Andy Clements over many years, I know that he is driven by two things. One is getting the best possible outcome for conservation, which is now a huge priority for Government. The second is doing it in the best possible way, with the best possible evidence. I am sure that exercising his independence in both of those things is what he will do, and he will make sure the taskforce does as well. I have nothing to add to what he said on that.

Q187 **Mrs Murray:** Are you confident that Defra will listen to the taskforce and act on its advice?

Tony Juniper: I do hope so.

Q188 **Chair:** Do they listen to you, Tony?

Tony Juniper: There is a separation of roles. Natural England advises and the taskforce will advise, and Ministers decide. Those two things are separated for good reason. Hopefully, we can be convincing with evidence and data in a way where Ministers would like to follow the broad lines that we are suggesting.

Q189 **Mrs Murray:** Is the taskforce truly a taskforce or just an advisory group? Will it drive the real change that we need or will it be just a talking shop?

Tony Juniper: I do not think it will be a talking shop. As Andy said earlier, we have some good examples and experiences to follow from

Scotland, where the comparable body had a slightly different name. I do not think that the name really is the thing that we should be focusing on. It is what it will do and what it will achieve. You have heard the ambition from Andy about harnessing evidence to be able to drive forward on the Government's and the country's ambitions for nature recovery.

There is huge public support for this, and so the more that the taskforce can do in unleashing energy to bring people together to be able to work on these subjects, the better. Whether it is called a forum, a taskforce or a reintroduction group, it does not really matter. It is about the impact. Looking at the group that is around the table with Andy there, the impact will be considerable.

Q190 **Ian Byrne:** I want to touch on the infamous NFU conference last month. The Secretary of State said, "I won't be supporting reintroduction of species like lynx or wolves. We just don't need to and we won't do". Were you consulted about this beforehand?

Tony Juniper: No. I do not believe that we were asked for advice to reach that conclusion, and I do hope that we will be able to advise with evidence as we go forward to look at these and other candidates for reintroduction. Wolf is not one that I have heard of being mentioned as something that is looking like a serious proposal at the moment. Lynx has already been the subject of some scrutiny and some interest, with various organisations looking at what might be done to bring that animal back.

It would be very good to focus first and foremost on the evidence, because we have a policy that says that we will look at reintroductions where we can glean benefits for the country at the same time as managing risks and potential downsides. That is what has been going on with beaver, and one would hope that a similar process would apply to lynx, whereby we can draw out the ecological evidence to understand the likely impact of those animals, whether they could come back to this country and whether there is sufficient landscape area available.

From what I have seen, there probably is in a cross-border landscape uniting the southern uplands of Scotland with the Kielder Forest area in Northumberland. Over time, if that area could be connected with the Cairngorms, a viable population of lynx could exist once more in the British Isles.

As I said before, the absence of these kinds of animals does have a major ecological effect. We have lost a guild of apex predators here over history, such as eagles, lynx, wolf and bear. They have been removed from the landscape. Some people sometimes wonder why we have so many foxes, badgers and crows, and the truth is that those creatures would have been predated by animals that are now absent.

Another one, of course, is the deer—not only our native deer, but also introduced ones. Anyone who saw *Wild Isles* with Sir David Attenborough

on Sunday evening might have heard a few remarks that he made about the fallow deer and the extent to which their numbers have rocketed in the absence of those kinds of predators.

I was in the Ashdown Forest last week to meet with partners who are looking at a major nature recovery project from the south coast up into the Ashdown Forest. That part of England is now seriously damaged by large herds of fallow deer grazing and browsing. The nightingale and dormouse have both now become absent in that part of England. Both species are of high conservation concern, and the reason is too many deer.

What are we going to do about this and is there some way in which we can carefully reinstate some of these missing apex predators? We should look at it, but saying that we should not do it because that view is held by some individuals is not the right way to go. We should look at the evidence.

Q191 **Ian Byrne:** Did that statement undermine the species reintroduction taskforce and the role of Natural England?

Tony Juniper: What it has done—and we are seeing it right here—is sparked a further debate about a very important subject. The Secretary of State has possibly helped us in deepening a discussion that we really need to have.

John Holmes: The word "balance" comes to mind here. I have had a lot of conversations in my conservation career where people say that we need to restore the balance. Very often, what they mean is that there are too many foxes or buzzards or something, and we want to knock that back to some imagined state. What Tony is talking about is restoring the balance by potentially putting back in a guild of animals that are not there. There is a similar notion for eagles, for example.

That is the ecological system, but if we think about the socioeconomic system as well, in the places where some of those animals exist, people are running tourism businesses. Frankly, we would hardly see any of these things unless people ran businesses like that. Even if people do not see them, they feel enriched by realising that they have functioning ecosystems and animals around them that bring something to that.

Tony Juniper: It is worth adding that the wolf is now in 28 European countries. Some tens of thousands of these animals now live in the suburbs of Rome, Madrid, Paris and The Hague, and society has not collapsed across the European areas where these animals are. They are bringing something that has been missing from the landscape for a very long time.

You are right, Chair, that our island is different because of that stretch of the English Channel that prevents these creatures from coming here of their own volition. I remember a colleague in Cambridge a few years ago

showing me CCTV footage of a bridge on the river Rhine, with the wolf reintroducing itself to the Netherlands by walking across it at night.

Of course, the wolf cannot do that in England, but if we did want to have a serious conversation, looking at the science and at the evidence, that would be a good way to proceed, because we do have that separation with the sea between us and where these animals are presently spreading once more.

Q192 **Dr Hudson:** I just wanted to mention squirrels again and wondered if you had any thoughts about the current thinking about pine martens and possible predation of grey squirrels. What is the current thinking on that, and what are your thoughts?

Tony Juniper: I recently had a conversation with the chair of the Forestry Commission, and we were exploring the benefits of doing a trial together to see whether we could quantify the impact of pine marten on grey squirrel through an introduction where we could gather data from a baseline. I do hope that we will be able to do that.

They differentially predate grey squirrels over red ones, because the grey squirrels, being heavier, have to stay on the thicker twigs, which is where the pine martens can get as well, whereas the red squirrels can get on to very thin, slender twigs at the end of tree branches where the pine martens cannot get. There is a nice biological safety mechanism built there to protect our native squirrel.

That is a good example of how these things co-evolved. The pine marten was once a widespread predator across England, and the red squirrel evolved with it. The grey squirrel came in, the red squirrel went down, and the pine marten has gone. Can we rebalance the system by putting pine marten back in, in a way that might make a difference? I would be very keen to have a look at that through a proper study.

Chair: It sounds like we ought to be eating more deer. I am told that they go very well with turnips, so the Secretary of State might go along with that. I probably should not have said that.

Q193 **Barry Gardiner:** Dr Juniper, you talked about the loss of the apex predator. In many respects, we now have to try to fulfil that function as human beings in our landscape. As I understand it, one of Natural England's roles for species reintroduction is providing a licensing authority function for reintroductions and translocations.

The Chair touched earlier on the protection that exists around animals like beavers. Certainly, when we were in Germany, we had very robust evidence to say that, if the beaver is above the village, it is doing a huge public service because it is stopping the village from being flooded, but, if the beaver decides to build its lodge below the village, it is doing a huge public disservice because it is contributing to the flooding of the village.

They are quite robust about licensing in the way that they can remove

and shoot the beavers there. Is that part of the role that Natural England would take on as we get further on into species translocations?

Tony Juniper: Yes, but not in all cases. This is something that we might want to pick up in a moment in terms of what is and is not currently licensed. Since you mention the beaver, we have looked at this animal in some great depth, including through the trial on the river Otter in Devon, which yielded a great deal of very useful information. We have also been informed by what some other European countries have been doing to build a series of recommendations that we have passed to Ministers and to Defra to shape the future policy that, hopefully, will see wild releases of beavers being licensed by us quite soon.

That decision is now with Ministers and, considering the very positive statements made by them, we are hoping that that will come through quite soon as something that we can get on with in terms of licensing the right kinds of releases in the right places, for the right reasons.

You are quite right, Barry, that there will need to be a licensing regime around this to reflect the aims of the 2018 25-year environment plan that says that we want to get the benefits of reintroductions and manage the risks. That is what the licensing regime will do.

To cut a long story short, there will be guidance around the criteria for where to release them, hopefully to avoid problems occurring in the first place, including avoiding low-lying areas like the Somerset levels and the fens of East Anglia, but then, once the animals are out, having a regime that is a hierarchy of interventions—for example, limiting dam size and having a licence to do that and, should that not work, removing animals and translocating them. There would be a last resort option under a licence for lethal control.

That is all laid out in terms of proposals that we have prepared, based upon the evidence, and we are waiting for there to be confirmation of that policy quite soon, because the benefits that we could get from beaver are very considerable indeed, not only for nature recovery in this country, but also in terms of climate change resilience, holding water in the landscape and helping to reduce flood risk in some places.

Chair: We are going to come on to licensing in a later question.

Q194 **Barry Gardiner:** You talked about Devon as being an ideal place to be releasing beavers, which corresponds with the evidence that we have received already, but you also touched on the fenlands, where there could be serious problems.

Yesterday, we saw a particular instance of a dyke along the Danube, where the beaver pipe had gone in 28 metres and, as a result of the raising and lowering of water in the dike, the fields had flooded disastrously. They had then engaged in remediation work, which consisted of putting stones along the dike, and they showed us other areas where they had been putting meshwork in.

One of the messages that we took from that—and they were really strong

in telling us this—is, "Do not wait. Do not do what we have done, learn from our mistakes. Start sorting out your infrastructure now, so that any new infrastructure project is future-proofed. You may start off in Devon, but, ultimately, as has happened in Bavaria, these will be all over the landscape. If you have not future-proofed your infrastructure, you will experience the same problems that we have had".

What is your role as Natural England? How do you link up with the Environment Agency, perhaps, to get the practical infrastructure amendments in place now?

John Holmes: Some of that stuff in terms of digging into banks already happens with badgers. We work with the Environment Agency to make sure that it can rapidly get through the legislation there and plug that with whatever it needs. We have already issued what we call class licences, which apply to a group of people. There is one that applies to the Environment Agency to do just that.

There are ones that farmers and land managers could register for to do the medium-level interventions. That is management of beaver structures outside the breeding season, so lowering dams if they need to. They simply do that by registering for that licence and then going through some training. We have trained over 200 people already on that, so we are prepared for that.

Q195 **Barry Gardiner:** What about the future-proofing of our infrastructure?

John Holmes: That is something that the Environment Agency is already thinking about. They are aware of where beavers are. We will need to work closely with them to make sure that our licensing tracks that, and put licences in place for what they need to do.

Tony Juniper: The other thing about the future-proofing of infrastructure is that it is not only beavers that we need to anticipate. We have already talked about anticipating the impacts of climate change and a blended approach in terms of how beavers become part of the future infrastructure.

I visited the river Glaven in Norfolk last year in the depths of that horrendous drought and heatwave, and some of the headwater streams that were still flowing into the Glaven were ones where there were beaver dams and beaver ponds. In that sense, you can look at them as part of the infrastructure that we will need for the future. Blending them into how we anticipate 2 degrees of global warming would be an important thing to do, alongside, as John was describing, flood defences, railway embankments and everything else, where they may cause some impacts.

Q196 **Barry Gardiner:** Can you perhaps outline for the Committee what Natural England's other roles are as the statutory adviser to the Government on reintroductions, apart from as a licensing authority?

Tony Juniper: As Dr Clements was saying, we have a great many experts in Natural England. Some of them are world experts on different

groups of species. We are constantly in dialogue with Defra around ecological questions linked to different elements of nature recovery, some of which embraces the species reintroduction side. We are constantly working on that.

The taskforce will create some more shape to what is already quite a complicated area. We have policy. There is legislation. There is licensing. There are various scientific endeavours going on. There is a whole group of partners out there trying to get things moving. Hopefully, the taskforce can start to pull some shape around all of this and give us some sense of overall direction.

Q197 **Barry Gardiner:** This is part of the concern that I want to tease out here, though, because your statutory role is to provide science and evidence-based advice to the Government. It is to act as an instigator and convener of partnerships for reintroduction programmes. It looks very much as if your role and that of the taskforce are pretty much one and the same. I know that you are providing the secretariat to the taskforce, but can you tease out exactly how you and the taskforce differentiate your roles?

Tony Juniper: You are right. There is a strong overlap there. As I recall the history of the taskforce being set up, there was a very strong ambition among Ministers to get on with doing species reintroductions and species recovery and, therefore, to create a new, separate organ that could give a focal point and channel together all of those things that I just mentioned in terms of the licensing regime, the science that is going on and the different policy areas. I am delighted that Natural England is working so closely with the taskforce in being able to give effect to that ambition, which we very much support.

Barry Gardiner: So they are your Praetorian Guard, are they?

Tony Juniper: Yes, you could put it like that. Why not?

Q198 **Rosie Duffield:** In this section, we are talking about species reintroduction's effect on wider nature recovery. The 2019 *State of Nature* report found that, since the 1970s, 41% of all Britain's species have declined, while more than a quarter of its mammals are at risk from extinction. That is pretty horrid, is it not?

Tony Juniper: It is.

Q199 **Rosie Duffield:** Are the Government doing enough to reverse that decline? How will species reintroductions help?

Tony Juniper: John, you will come in on this as well, I am sure. I sense that we are just at a turning point right now. We had the breakthrough in Montreal at the end of last year with the agreement of a new global biodiversity framework. That was followed a month later in this country with the publication of the environmental improvement plan, which, for the first time, is putting targets into legislation.

You can see a similar shift that took place on climate change 15 years ago, where you had global accords. Paris was a bit more recent than that. We had the domestic Climate Change Act, with legally binding targets, which really started to get us moving on this. We are just at a similar point on the nature side.

Hitherto, this has not been mainstreamed enough in terms of nature being reflected in policies outside those controlled by Defra. We have not had enough weight attached to nature recovery. It has always been seen as a regrettable but inevitable price of progress that we see the decline of nature, and we have now broken through that. We have a different story, which is about nature being essential for health and wellbeing, and about it being the subject of a major global agreement, which the UK helped to broker, as well as domestic laws now coming through.

If we are to achieve the targets that are being talked about and, in that global agreement, reduce or get rid of extinction risk by 2030, this is a critical role for the species reintroduction piece. If we are going to avoid seeing more species going down and disappearing altogether, we are going to have to deploy these kinds of tools that we are talking about today. Hopefully, I will be proved correct, if we look at this in 10 years' time, in terms of this being the turning point, when, finally, we really did get serious about this stuff.

Now 2030 is only seven years away. We have set some incredibly stretching goals, both globally and nationally, but if we are going to do something different to what happened the last time a set of global goals were set in 2010—the Aichi targets—it is going to be all about implementation, delivery and actually doing stuff. That is where we cannot hesitate with these kinds of things. A lot of caution is attached to species reintroduction. As well as great care, we need to maintain great ambition; otherwise we are not going to meet those targets.

John Holmes: Reflecting on a long career in nature conservation, my answer to your question would only ever have been no in that time, but, for the reasons that Tony gave, it is possible to feel really optimistic now. Modelling shows that the species recovery targets and the environmental improvement plan are possible to meet. The key thing with reintroductions is seeing them as part of a wider and really significant turning point in nature recovery.

Other mechanisms are being brought in now, such as local nature recovery strategies, so that local communities see perhaps keystone or iconic species for them being part of a nature recovery effort. By putting it in that context, it is truly owned and not just something that Government, Natural England and a few NGOs do.

Q200 **Rosie Duffield:** That is such an important point, because that is how people engage.

Tony Juniper: Exactly.

John Holmes: Exactly.

Q201 **Rosie Duffield:** They can physically see something. It is not just a target written down on a piece of paper. Children can go and visit the bison in Kent or whatever, and that is really important.

What are your thoughts on the Government's target to ensure that species abundance in 2042 is greater than in 2022, and at least 10% greater than 2030 levels? Is that ambitious enough?

Tony Juniper: My take would be that that would be the minimum. I am hoping that we can exceed that target. Certainly, everything that we will do at Natural England will be setting out to do that in terms of the speed with which we move forward and the impact that we can create with the tools that we have.

A moment ago, Rosie, you said something that is really important about this, and that is the extent to which the discussion we are having here today, which can get quite technical, is, at another level, massively engaging for the public if we can get this right. People do relate to species more than broad concepts of biodiversity or global treaties.

You can imagine a group of ambassador species that could drive nature recovery in England—the beaver, the curlew, the dormouse, the turtledove, the chequered skipper butterfly that Andy mentioned, the swallowtail butterfly or the great crested newt. There are things that get people quite excited.

John Holmes: I was going to mention chough, which came back to Cornwall under their own steam.

Mrs Murray: It is only us who can mention choughs.

Rosie Duffield: They are in Dover.

John Holmes: I resisted saying "Cornish chough", because there are now really good proposals in Kent. I had not realised the cultural significance of choughs there. That is learning from the experience in Cornwall of a reintroduction that did not work, but also the natural colonisation. There was an element of luck in the recolonisation, where it colonised, but not in the planning that went into the habitat management and making those conditions right. Even if they had not come back, that habitat for butterflies linked to the local farming, beef production and grazing on that land is incredible.

Q202 **Rosie Duffield:** They were doing all the other good stuff that meant that things came back. Should there be an interim target so that progress can be checked?

Tony Juniper: The environmental improvement plan has five-year targets, but I do not know if there is one on species abundance. I do not know if we have enough data to do that on a five-year basis.

John Holmes: There are no five-year targets set in that, but, in reality, with Defra, we will need really clear trajectories to map; otherwise we will be having this conversation in two years' time, and asking, "Is it even harder now?" We have to start that turnaround now and see it measured.

Q203 **Julian Sturdy:** Natural England has said that it is "committed to supporting, delivering and championing" reintroductions where they are "required and appropriate, and where benefits to the environment, the economy and people are clear". Could you outline the potential social benefits of reintroduction projects and provide examples of any that you would support? I know that you have talked about some already, but it is worth outlining a little further.

Tony Juniper: In terms of ones that have a social dimension?

Julian Sturdy: Yes, exactly.

Tony Juniper: One that comes to mind is the return of the white-tailed eagle along the south coast of England. We granted a licence to Forestry England and the Roy Dennis foundation back in 2019 to begin the translocation of birds from Scotland, so a spill-over from nests up there.

This project was very much inspired by the experience of what occurred on the island of Mull, where a multimillion pound tourism industry sprung up around the white-tailed eagle, with people traveling from all over the British isles to go and visit them, and the Isle of Wight being similarly placed as an island, but potentially with a far bigger opportunity, considering its proximity to London and other highly populated centres in southern Britain.

That is part and parcel of the thinking that has gone alongside the ecology and the biology of bringing that bird back down there. I find that project particularly exciting. That was the last place where those birds occurred in England. The last breeding of a white-tailed eagle in England in the 1790s was right there on the Isle of Wight. I am told that, this year, we may see the first nest in England for 240 years, or whatever it is.

If the Committee would like to organise a visit to go and see something relating to the work of this Committee, we would be delighted at Natural England to see if we can organise a visit for you all to see the first breeding white-tailed eagles in England for more than two centuries. It is blazing a trail for many more tourists to be coming to the south coast and helping to create jobs and boost the economy.

I have one other anecdotal story, but in a similar vein. I was writing a book 12 years ago and went to Scotland to research the beaver reintroduction, which was just beginning in Argyll at that time. I went out of my way to drive to multiple hotels, cafés and pubs to speak to the proprietors and ask them what they thought about the beavers coming back in that landscape.

There was a mixed media coverage of the whole thing, with some

controversy around it, and I discovered a 100% support rate among those small businesses, which had seen an uptick in traffic from people coming there to buy tea and cake, to spend bed and breakfast time and everything else, as a result of those beavers being there and people having a chance to get a glimpse of them.

Looking at that wider economic impact is critical, because sometimes we might be drawn into, "This animal could cause this bit of damage to a bit of infrastructure, or it might do something else", when, in fact, if you look at the broader picture in all of the economic sectors that might be affected, you might see some big upsides that are not immediately obvious until after the event.

Looking at experience from across the country—and, indeed, in other countries—where we have successfully turned the corner with either very rare or missing animals, and then that bringing some benefits in the wake, is an important thing to do.

Q204 **Julian Sturdy:** How do you evaluate the benefits against the risks within that process?

Tony Juniper: This is where it is about gathering as much evidence as possible, putting it all together and seeing the upsides and downsides. John has probably been closer to some of this than I have.

John Holmes: In the code that was launched in 2021, one of the key principles is that you evaluate the benefits as well as the potential risks, and that you make sure you engage with anyone who can provide some evidence on that. One of the issues is that that code is voluntary in many cases, unless a species happens to be caught by the current legislation, which is a bit of a mishmash of stuff that was written in the 1980s.

That is why one of our recommendations is that, if all conservation translocations were to be licensable—and, as I described for the beaver, that can be done in a way that is not too onerous—that would be a way of us requiring that sort of consideration for every translocation. Pretty quickly, you could identify one that needed a minimal approach because the risks were small. If the risks are great, as they would be in some of the species that we have talked about, it requires a bigger assessment. At the moment, not everyone would have to do that assessment.

Q205 **Julian Sturdy:** What about non-native species? Could you think of any examples there, and how would you evaluate them?

Tony Juniper: This is where the question of proportionality may be one for the Committee to reflect on a little bit, in the sense of the demands we place on the return of missing animals and plants compared to how relaxed we sometimes are about the release of things that are non-native, which is ongoing in the case of very large numbers of pheasants and partridges, as mentioned earlier.

The Pacific oyster is another one, and another one would be the Sitka spruce, a non-native tree that sometimes escapes out of plantations into

heathlands and other areas important for nature. I wonder if, at times, we are more relaxed about that, because we can see the immediate commercial attractiveness of game shooting, forestry and seafood production, whereas it is sometimes harder to immediately see the economic upside of ecological restoration, and so we tend to be more cautious with it. There is a question of proportionality there.

If we are concerned about species introductions and risk being linked to that, it is the invasive non-natives where we probably should be putting the bulk of our attention—rhododendron destroying woodlands across the country, the grey squirrel broadly making forestry here now nigh on impossible in terms of producing good-quality wood, and various snails in different water bodies causing damage to native vegetation. There are big numbers, in terms of the damage caused by these non-natives.

Chair: The signal crayfish.

Tony Juniper: Yes. There is every good reason to see this as a major challenge. Globally, if you look at recorded extinctions going back to 1500, at least in relation to birds, the principal reason for those is non-native invasive species—the Polynesian rat getting to various islands in the Pacific, weasels and foxes going to New Zealand, and so on.

Q206 **Dr Hudson:** We know that some reintroductions cause more conflict than others. Tony, you have talked about the proportionality of that. Does a proportionate consultation process specifically, depending on the anticipated risks, have some merit moving forward?

Tony Juniper: It is essential. John, you might want to come in on the code. We would say that, if we would like to achieve the benefits arising from the re-establishment and expansion of either missing or declining species, being early in the process in engaging with the wider community of stakeholders is essential. As has been pointed out, for something like a predator, this is likely to be a bigger conversation than if it is a butterfly, for example.

Q207 **Dr Hudson:** Is there a way that species could be categorised, if that approach is taken forward, in terms of high risk down to lower risk?

John Holmes: In practice, that is what happens if a species is captured by the legislation. We have a screening questionnaire that, effectively, goes through the code and starts to assess that risk. That then enables us to decide on the level of demands that should be put on the proposer of that scheme. The issue, as I have said, is that that is the case only if a species is caught by section 14 of the Wildlife and Countryside Act, which not all are.

Q208 **Dr Hudson:** If that process is happening organically, does it need to be made a little more explicit with regard to the ranking of species in terms of risks versus benefits and serious impact? You have talked about some of the more benign things that could be done but really would benefit. It is happening, but is there not a framework to hang it on yet?

John Holmes: Reflecting on the conversation that was had with Andy and now, there is something around communicating that. There is a huge body of evidence internationally on success or otherwise, risk factors, and analyses that have been done. It is about communicating reintroduction in that context, but also in the context of wider nature recovery in this country.

Some conversations today quite easily get into good/bad, or how good/how bad. We need to see it in the context of a turnaround in the national effort around nature recovery. Somebody might think that a reintroduction is bad, but, with better communication and clarity that, if a beaver is on your land when they are not breeding, you can do this training course and alter the height of a dam, it might all feel a bit more straightforward and there might be real positives in it.

Q209 **Dr Hudson:** Would you recommend that you have a slightly different process for plants versus animals, or is it really hard to disarticulate the two if we are thinking about biodiversity in the environment? Should we be thinking about having one approach for plants and one approach for animals?

John Holmes: They are already treated very differently in the legislation. If our recommendations about capturing all translocations were taken up, we would have to look closely at the practicalities of that. The point is not about capturing all forestry or all gardening, but about finding the right way of assessing the costs and benefits of reintroductions and translocations for conservation purposes.

Q210 **Dr Hudson:** I know that we want to do all this on an evidence base and risk analysis, but is there a quick list of plants and animals that both of you think could be introduced or reintroduced at lower risk? Are there any plants or animals that you think are low-hanging fruit that we could do?

John Holmes: If I think about plants first, some that we are already working on translocation for on a small-to-modest scale could have huge benefits for biodiversity and ecosystem functions. One example is projects to spread sphagnum moss at really low cost over huge areas in places where that has been lost. You can reinstate bogs, or seagrass beds in our marine environment. They soak up a massive amount of carbon and are fantastic habitats for species that we might use as commercial fishing stocks. That, scaled up, could make a tremendous difference for plants.

Tony Juniper: You are touching on an important point there, John, which is about how we would benefit from prioritising those species that bring a much bigger positive ecosystem benefit. Putting back a particular insect may or may not lead to changes to the overall ecosystem. Andy mentioned the case of the chequered skipper, which has led to a change in the management of an area of woodland that is benefiting a whole load of other species besides.

Sphagnum and seagrass are good examples of that, where you are bringing a whole range of benefits in the wake of that, including for seahorses, for example, when it comes to seagrasses, and also for carbon capture and water management with sphagnum. The beaver, the classic example of the ecosystem engineer, is bringing a whole raft of benefits in the wake of its return.

If we prioritise those kinds of species that are going to give us a multiplier effect for nature recovery, that would probably be one way of compiling a priority list. This country is fantastic in having such a huge number of amateur, knowledgeable enthusiasts who know about grasshoppers, snails and obscure plants. Us being able to work with them and to harness that energy in the best possible way is something that we would not want to diminish as we are thinking about how we do priorities at the same time.

John Holmes: Thinking locally as well, reintroduced species can be a tremendous focal point for people to think about pride in their place. Perhaps not as charismatic as eagles, I visited the Avon gorge recently. As well as explaining the fantastic architecture in that bridge, the guide was telling me about the Bristol onion, which occurs only there. They are looking at ways to spread that and make sure that it does not die out.

One of our most recently discovered species is the York groundsel, a plant that survived in three pot plants on somebody's window. It is a native species that occurred only in York, and that is being planted by Network Rail and the local authority now. Locally, people can really take pride in that, and there will be something like that everywhere, which could be a real focus for local nature recovery.

Q211 **Dr Hudson:** Tony, if I can come back to something you said earlier, you talked about potentially getting species that are a bit more resilient from different parts of the world, such as southern Europe, which we could be looking at in the context of climate change. We were at the Natural History Museum today talking about the collections that have been taken over hundreds of years coming in. Is there scope with that, looking at collections, but also the gene editing Bill that is just going through Parliament now, in terms of trying to help natural processes, but doing it in a slightly quicker way so that we get more climate-resilient plants and potentially more disease-resistant plants? Is there potential in that?

Tony Juniper: Possibly. Those technologies have tended to be more agricultural, in terms of gene editing. I would guess that you could apply some of that to non-agricultural species.

I will tell you about one thing that was of great interest to me recently on a visit to the Knepp estate in Sussex, thinking about climate change resilience. Some research that they had done revealed something about the pollen grains that were coming into the oak trees and pollinating the pedunculate oaks down there. They were picking up pollen grains coming from northern Italy, would you believe, into southern England on the

breeze, thereby confirming that there is genetic contact between trees in southern Europe and trees in this part of the world already.

Some of the acorns falling off those trees in Knepp will already have genetic material coming from counterparts living in the Mediterranean basin, which is really quite an exciting prospect when you think about the future resilience of our ecosystems to climate change, leading me then to conclude that the natural regeneration of those oak trees will probably have a premium in relation to the climate change question compared to planting oak trees that have been reared by putting acorns into a pot and planting out whips.

There are different ways of looking at this, but that connectivity between here and other parts of Europe is quite an important one, whether it is through natural processes like that or whether we would go and seek seed from southern France, northern Italy or parts of northern Spain, in terms of how we anticipate our vegetation being resilient in the future. It would have occurred.

Under previous climate changes, all of our trees retreated when the ice came, and they all came back again when it warmed up. It is going to warm up now more quickly than it did at the end of the ice age, and so they are probably going to need a bit of help, but reaching for exotic species that were never here is not the first thing that we should prioritise.

Q212 **Dr Hudson:** We talked there a lot about the potential benefits. Apologies for pivoting back to risks, but, as a vet, I am very worried about biosecurity and animal disease introduction. I will just ask you a similar question that I asked Andy earlier in terms of the potential risks of pathogens coming in, known or unknown. Is that a body of work that you guys at Natural England are doing? Do you have crosstalk then with other Government agencies such as the APHA, as well as with the chief vet, to ensure that you are alive to the issues and doing a proper risk analysis so that we do not compromise our biosecurity?

Tony Juniper: We do.

John Holmes: We do for any translocations that we are involved in, so we have long had an MOU with the Zoological Society of London to provide that sampling and advice. Disease risk assessments form part of any translocation that we do. We would require them as part of a licence for any species proposal that was captured by the current legislation. The code would encourage people to do it, but, of course, unless you are captured by the legislation, you do not necessarily have to do it. It is central in our work, and we work closely with other bits of Defra.

Q213 **Dr Hudson:** Are you talking about it to the APHA and the chief vet, etc?

John Holmes: Yes.

Tony Juniper: We also have a long-running partnership with the Zoological Society of London looking at animal disease.

John Holmes: It is coming higher up the agenda for reasons that are quite obvious. For example, I signed the first licence for release of beavers in this country, in Devon, long after the horse had bolted, because there were beavers around anyway. The point was that they had been recaptured in order to test for viruses, including coronavirus, which we did not understand the significance of at that time. The licence was then to release them back with a really clear risk assessment and proposal, and I am glad that we did, because that has been really successful.

Q214 **Derek Thomas:** Tony, thank you again for all you are doing and for your enthusiasm; it is great. I am going to paraphrase the bang for the buck point that you were making earlier. On Scilly, as well as on Lundy, we got rid of lots of rats and saw a significant recovery of the Manx shearwater. At the moment in Orkney, they are culling stoat in order to recover the Orkney vole and others. If we looked at the economics and the best result in terms of focusing our efforts, would we still have done those two particular projects?

Tony Juniper: On Lundy and the Scillies, from what I know, I would have thought so. They have both been spectacularly successful, have they not, in restoring seabird populations? This is a great cautionary tale in the sense of the expense and effort needed to achieve that outcome compared to not releasing the rats there in the first place, and the extent to which we need to look at this risk of species moving around, primarily in terms of non-natives, I would argue. Those are the ones that give us the real headaches and the real problems, not the natives.

Q215 **Derek Thomas:** I absolutely agree. There is quite a bit of work to do—and I know that you have been doing a lot of that effort—in getting the British public to understand the massive importance of the work that is happening on these islands, but also in Orkney at the moment with the stoat. It was good to hear about the Cornish chough. It is just grazing on rough land that has really helped that recovery. There are really important things that the British public want to be engaged in, because there is lots of debate about how we use rough land and whether we should reduce grazing on rough land. It is an interesting debate that I know Natural England is trying to lead and to galvanise.

In Cornwall, we have a real ambition to introduce the beaver, which we have talked about quite a bit. Rewilding Britain's comment was that the species reintroduction licensing regime is "too bureaucratic". We would argue that that probably is the case in Cornwall. Do you understand the concerns that we have when trying to do things to deal with flood management is just so difficult?

Tony Juniper: Beaver is still work in progress in terms of wild release, but you were involved with enclosures, I dare say, if you were finding

delays. We hear that there is this feeling that things go very slowly, but the truth of it is that we do not license quite a lot of it at all.

The pine marten is a good example from the conversation earlier on, which is already a native species in Britain. The wildcat would be another one. The polecat is one more. These do not require a licence, because they are native species. They happen to have disappeared from most of the country, but the fact of them being natives means that people can move them around, which is why John's earlier point is so important, in the sense of us being able to have a regime where all translocations have to have some scrutiny in order that we can comply with those guidelines.

It is those guidelines that we are talking about today in terms of disease, the provenance of the animals or plants, the impact that they will have and the animal welfare considerations. Everyone would agree that those things are important. Therefore, they do need some scrutiny. Therefore, that takes a bit of time. Therefore, some people may call it bureaucracy. Other people might say, "If we are going to do this right, that is what we need to do", and that is where we would be, is it not?

John Holmes: Yes, and that tiering point comes in with the experience of one or two examples. You could then start to roll that out and say, "If you follow this process, you do not have to go back to the start again".

Q216 **Derek Thomas:** That takes you back to my point about public awareness and information. You are suggesting that it might not be a precautionary approach, but is there a precautionary approach that may, in turn, reduce or slow down the reintroduction of nature recovery? I know that we have talked a lot about beavers, but we want to introduce beavers right down in west Cornwall, near Land's End. I am being told that Defra is holding up the process, but I do not know if that is true, and you are suggesting that there is more to it than that. Are we slowing down our ambition to recover nature by some of our approaches?

Tony Juniper: We could do, but that is certainly not what we are doing at Natural England. If there are other blockages elsewhere, we can, hopefully, overcome those. What we are talking about here is this accommodation between taking care at the same time as meeting big ambition. We would not want to do something that did not quite work or had the wrong effect and, therefore, we take a bit of time to scrutinise a decision before we do it.

It does seem like a sensible thing to do and there is no one more concerned about the speed at which we go than I and the team at Natural England, but we need to do it with care. That care plus ambition is the space. What we must not do, in my opinion, is to stop things that are obviously a good idea—i.e. the careful reintroduction of the beaver—because we get too cautious to the point where the ambition is not fulfilled. Being able to do these things right in a way that is going to bring the benefits, while helping manage those risks, is the sweet spot that we are all aiming for.

Q217 **Derek Thomas:** If you were to plot it on a graph, we are laying foundations at the moment, so the recovery of some of these species is fairly slow. As we get this knowledge in place and all the risks balanced, you might see a quite a rapid increase in five or six years.

Tony Juniper: I do hope so.

Derek Thomas: Me too.

John Holmes: Particularly in some of the places where beaver are being proposed to be released—in London, as I saw on social media a couple of days ago. We are only just starting to get used to seeing an animal of that size around us on waterways, which is a fantastic thing, but it is a big change.

Tony Juniper: Not quite a hippopotamus, but still a big animal for English rivers.

Derek Thomas: Stick with it, both of you.

Q218 **Mrs Murray:** I want to turn to good practice. I have a couple of things to say on this, just to enhance the questions that I have. You mentioned Pacific oysters, which there is a bit of controversy around at the moment, is there not?

Tony Juniper: There is.

Q219 **Mrs Murray:** I know that one of the hot spots is in Wilcove, in my constituency, which Natural England has acknowledged. I am also very shortly going to Cabilla, which is also in my constituency, to visit beavers, although they are in an enclosed area.

What is good practice for species reintroduction? Is it widespread? How can it be promoted further? I know that the jury is out on whether the Pacific oyster situation is a good or a bad thing, but could you just describe to me what you think is good practice?

Tony Juniper: There is a distinction between conservation reintroductions, which are mostly what we are talking about, compared to introductions for other reasons, including commercial purposes, which is what the Pacific oyster would be. I do not think that anyone would have said that we should have introduced that particular bivalve mollusc from a different ocean basin for conservation reasons. We did it for reasons of food production, and that is a perfectly rational thing to do.

However, sometimes they can cause problems. There is experience in the Netherlands of these things building up enormous reefs that become problems for navigation. They can smother the seabed, and we have already recorded hundreds per square metre in England. That has an ecological set of consequences that can be quite damaging for native wildlife.

How we manage that is a really tricky question, of course, because people's jobs depend on it. We are getting a useful amount of food out of

them, and they are really quite nice with a glass of dry white wine, so you can see why people would want to invest in operations to bring them here. We need to be careful about the inadvertent downsides, which can include the things that I have just described. When it comes to this one, I think I am right in saying, John, that CEFAS leads on this in terms of the decision-making.

John Holmes: Yes, it is licensed by CEFAS.

Q220 **Mrs Murray:** In terms of any species introductions that you license now, how are you going to ensure that a similar sort of thing does not happen in the future? What is your good practice rule?

John Holmes: It is described in that code of 2020-21, and it is about having a clear plan and making sure you maximise your chances of something working. These sound quite obvious, but, without going through the steps, you are not going to have success. You need to look at the costs and benefits, especially talking to stakeholders. If you are reintroducing one plant in one place, there will not be many. If you are talking about something like beaver, there will be many, so it is about going through that.

Really importantly, you need to have some sort of provision for adaptive management, so that, if something does happen, you know what sort of licence you might need from us, you have access to funding to do something about it, and you have a plan in place to do that.

Again, that is not for Government or Natural England to do. We have the expertise. We can have a regulatory function and an advice function, but where a release is captured by the regulation, and we license it, we would require following that code. Where it is not captured, we would encourage people to follow that code.

Q221 **Mrs Murray:** Have you had any feedback on your good practice guidelines that were published in 2021? If so, have any gaps been identified that should be addressed?

John Holmes: The code itself was well received. It is based on internationally accepted practice. It looked at what had happened and was working in Scotland. The basis of the code is there and right.

The gaps are probably in seeing how that would translate to reintroduction contributing to nature recovery on the scale that we need it to in order to start to turn around the terrible declines that we see. Some of the questions are the ones that have emerged here. What about that guild of top predators or big herbivores? There are really difficult questions around those, but also opportunities that have not been explored enough yet.

Also, what about the place of assisted colonisation in the face of whatever climate change does? How much will we have to move species? Another issue is disease, keeping on top of things that emerge on that and just

making sure that those things are adequately looked at.

Q222 **Mrs Murray:** Should there be a legal obligation on projects to follow the publicised good practice and the advice of the taskforce?

John Holmes: We think so, and we have advised in our advice that all translocations should be brought into regulation.

Q223 **Mrs Murray:** Are the penalties for projects that do not follow good practice tough enough, and are they enforceable?

John Holmes: They are difficult to enforce, because levels of proof are difficult to get in terms of finding who might have released something or whether that something has been there for a long time. There are examples of beavers being in places without some sort of official sanction, or examples of amphibians being in ponds where it is unclear how they have got there. They are difficult to enforce and, therefore, the sanctions are rarely invoked.

The point of recommending bringing everything under regulation is not to get to that point, but to make sure that proposals go from the well-meaning, "We would like to do it" and into, "There is a code here and, if you follow that, you will achieve something that you set out to do".

Q224 **Barry Gardiner:** What role should the landscape recovery and local nature recovery schemes under ELMS have in supporting the reintroductions?

Tony Juniper: It is evidently the case, in terms of things that have disappeared, that they were subject to pressures that have to be resolved in order to bring them back. There is always a range of factors as to why something disappeared in the first place—loss of habitat, change in an ecosystem, too many predators, persecution, or pesticides.

Opening a cage with some rare animals in it and letting them out into a landscape that is as it was when they went extinct is very often not going to be a good idea, so we need ways to incentivise land management to be compatible with the return of some of these animals and plants. The biggest single thing that we have to work with is the new agricultural policy and those two schemes in particular—landscape recovery and countryside stewardship plus, as it is now called.

During my visit to the Ashdown Forest last week, this came up in the conversation, with a landscape recovery pilot proposal being put together by local stakeholders. In that part of England, they would like to look at least at the possible return of the black grouse, which, would you believe, was still there in Sussex in the 1930s, but which went extinct as a result of changes to the ecosystem. Putting that bird back there could be possible if we can get the habitat right, which, in turn, will require some deer management.

Q225 **Barry Gardiner:** On that point of getting the habitat right, look at Loch Gruinart in Islay and you see the huge number of chough that you have

there, simply because of the change of the wintering of the cattle.

Tony Juniper: Yes, indeed.

Q226 **Barry Gardiner:** Yet, in Bavaria, where we were at the weekend, it was a barren landscape, because there are no cattle. They are all inside. There are no cattle outside, either in summer or in winter.

Tony Juniper: There we are. Blending agriculture into nature recovery is a critical part of what we must do. On chough, John, am I am right in saying that the agri-environment schemes were deployed on the Lizard coast before the chough turned up?

John Holmes: Yes.

Tony Juniper: When the chough came back, they took. They were able to stay, because we had already put in place the agri-environment schemes. They equally could have been bred in captivity and released. They just happened to reintroduce themselves. It is a good example of what things with wings can do.

John Holmes: Before they got there, the farmers were asking, "Are we doing this to get choughs back?"

Mrs Murray: Cornish choughs, of course.

Tony Juniper: They were probably French originally.

Mrs Murray: Not blackbirds from Kent.

Rosie Duffield: There are chough in Dover.

Q227 **Chair:** One thing occurred to me on that subject. We have species that are in decline, like hedgehog. We were very keen on my farm to try to encourage hedgehogs. We got in touch with the hedgehog society. They said, "How many badgers do you have on the farm?" and we said, "There are so many that we cannot even count them". They said, "Well, forget it". There may be species that, in 10 years' time, we will be trying to reintroduce, because of the effects of other management practices and protecting one species at the expense of another. Do you have a red list of species that we do not want to reintroduce, because we would rather keep them and not have to reintroduce them?

Tony Juniper: If the question is about things that we would like to stop the decline of before we have to do augmentations, it is all of them. I do not know if we have a list. There used to be biodiversity action plans that prioritised various species. I do not think that we have anything comparable now, do we, for species priorities?

John Holmes: No. We have the species recovery programme, which is for 250 target species, and there is a range of interventions, from the scientific to understanding what you need, habitat management and, if you need to, reintroduction. Reintroduction is at the end of that hierarchy of, "Do it if you have to, because you have lost the rest of the battle".

That is where potentially looking harder at assisted colonisation and moving species in response to climate change might come in.

Q228 **Chair:** Just before we close, I would like to finish up with a couple of things. One is about money. In Bavaria, we saw very large amounts of money being spent on engineering works to make some of their critical water infrastructure beaver-proof. Lots of compensation is paid to farmers for their maize and sugar beet crops. They are very enthusiastic people, but the enthusiasm was there because the money was there to support that. Do we need to have a conversation with Defra about a budget for some of these species—not just beavers but for other species—to ensure that we can support farmers who have their lambs taken by white-tailed sea eagles or whose farming has been impacted by these species?

Tony Juniper: That is the approach there. These are policies that Defra decides. Our advice would be that we need to line up these incentives behind nature recovery broadly, which would include introductions and trying to recover the fortunes of particular species. At that general level, where we can incentivise the right behaviour to reward people who are doing the right thing, that is, broadly speaking, the direction of travel that we advise on.

Then, of course, it gets into a great deal of complexity in terms of how much you get paid for what, which is what has taken some time now in redesigning the agricultural policy to get ELM from what we had before under the EU.

John Holmes: It would be a political decision, but I would observe that the policy in this country for some time has been to pay for a positive outcome and for some gain that is there, rather than paying for something that you have lost. I would also put it in the context of us talking about just letting wildlife back in, where it has been pushed back to an incredible extent in this country, and society looking for more wildlife there. The question of compensation could be tricky in that respect.

Q229 **Chair:** We also saw in Bavaria how a lot of the decision-making and advice was very localised. They had 500 beaver ambassadors, who could be local mayors, members involved with farming groups, or even conservationists. They seem to have an awful lot of autonomy in terms of saying, "Yes, you can do that". If someone picks up the phone and says, "We have a beaver in this town and do not know what to do with it", the decision-making is very quick, even within 24 hours, which does not sound like the bureaucratic type systems that we tend to have in this country to get a permit to do something.

Tony Juniper: The advice that we have given to Government here is to suggest that there is a named project officer and someone who is the responsible person when a beaver project is set in motion. The criteria that we have talked about include the right catchments, risk

assessments, trying to reap the benefits that can come with beavers, and then having people who are responsible for that project and to whom you pick up the phone if there is a problem with a road being flooded or a culvert being blocked. This came in part from experiences on the river Otter in Devon, where the Devon Wildlife Trust was playing that kind of role, so people could phone up and get someone to come and advise or do something quite quickly. That is baked into the approach that we have suggested should occur here, and our hope is that we will see a ministerial decision on that quite soon.

Q230 **Chair:** Would that be vulnerable to campaigning litigants and Wild Justice type people who would say, "No, you cannot shoot that beaver, even though it is in the wrong place and everybody agrees that"?

Tony Juniper: No, I should not have thought so. Under the licensing regime, as John has described, it will be a class licence. There will be people who have been trained in the discharging of the licence and, broadly speaking, as long as they are complying with the conditions of the licence, it should be fine.

John Holmes: If we are talking about management on that scale, we are talking about a recovered population, really. Local communities taking sensible decisions about recovering nature sounds absolutely fantastic to me. That could be linked to local nature recovery strategies and licensing systems put in place to allow groups of people to manage things that work, if that is leading to nature recovery.

Q231 **Chair:** Finally, should we be considering an exit strategy for some species if it does not work out, maybe nationally or locally, such as no beavers in Lincolnshire or, "This particular species is causing particular problems here, so let us not do it"? If these reintroductions are not successful, should we be saying, "Let us just reverse away from that species and concentrate on other things"?

Tony Juniper: Part of the code is having that safeguard there and an exit strategy if things do not go according to plan. That would be exactly part of the good practice that Sheryll asked about a moment ago. It is about having a proposal that is based on evidence, which has money management involved, monitoring and evaluation, and then an exit strategy if required. If you do this right in the first place, you should not need the exit strategy, because you would not have put them in Lincolnshire to start with.

Q232 **Chair:** I had a meeting with the Woodland Trust last summer, and it said, "The problem with beavers is that you have the perfect habitat for them but they will not like that. They will go somewhere else", and that is often the great thing about wildlife. It will go to the area where it feels best able to create its own habitat.

Tony Juniper: Indeed, and if problems arise they will need to be managed. Something that we do routinely at Natural England, day in, day out, is wildlife management and licensing of issues linked to damage to

property, to public health and safety, or to aircraft safety, for example, and also conservation, so predator control and ground-nesting birds. We are doing this all the time and it is part and parcel of how we do conservation in this country.

Chair: Thank you very much indeed for your evidence.