



OFFICIAL REPORT  
AITHISG OIFIGEIL

DRAFT

# Environment, Climate Change and Land Reform Committee

Tuesday 21 January 2020

Session 5



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Pàrlamaid na h-Alba

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**Tuesday 21 January 2020**

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**ENVIRONMENT, CLIMATE CHANGE AND LAND REFORM COMMITTEE**  
**2<sup>nd</sup> Meeting 2020, Session 5**

**CONVENER**

\*Gillian Martin (Aberdeenshire East) (SNP)

**DEPUTY CONVENER**

\*Finlay Carson (Galloway and West Dumfries) (Con)

**COMMITTEE MEMBERS**

\*Claudia Beamish (South Scotland) (Lab)

\*Rachael Hamilton (Ettrick, Roxburgh and Berwickshire) (Con)

\*Angus MacDonald (Falkirk East) (SNP)

\*Mark Ruskell (Mid Scotland and Fife) (Green)

\*Stewart Stevenson (Banffshire and Buchan Coast) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Professor Alison Hester (Grouse Moor Management Review Group)

Professor Colin Reid (Grouse Moor Management Review Group)

Professor Alan Werritty (Grouse Moor Management Review Group)

**CLERK TO THE COMMITTEE**

Lynn Tullis

**LOCATION**

The Robert Burns Room (CR1)



## Scottish Parliament

### Environment, Climate Change and Land Reform Committee

*Tuesday 21 January 2020*

*[The Convener opened the meeting at 09:33]*

#### Grouse Moor Management Review Group

**The Convener (Gillian Martin):** Welcome to the Environment, Climate Change and Land Reform Committee's second meeting in 2020. I remind everyone to switch off mobile phones or set them to silent, as they can affect the broadcasting system.

The first item on our agenda is evidence from members of the grouse moor management review group on the group's report, which was published in December. I am delighted to welcome Professor Alan Werritty, who was the chair of the group, and Professor Alison Hester and Professor Colin Reid, who were members. The public briefing paper for this session sets out a number of themes and issues that we wish to explore. To kick off, I ask Professor Werritty to give us a brief explanation of the scope of the review.

**Professor Alan Werritty (Grouse Moor Management Review Group):** I will go back to our remit, which defined what we were tasked to undertake. It was to come up with recommendations to promote the more sustainable management of grouse moors across Scotland. That had two dimensions. The first was to make recommendations to reduce the illegal killing of birds of prey. Secondly, we were charged with looking specifically at the land management practices of muirburn, the culling of mountain hares and the use of medicated grit. Those two requirements were to be seen in the context of recommendations that would not have too adverse an impact on Scotland's rural economy. We were also specifically invited—by this committee, I think—to review the option of licensing, and we spent a great deal of our time exploring that. I am happy to return to that in due course.

**The Convener:** A number of members have questions on the specific issues that you have mentioned.

In an earlier discussion, Claudia Beamish made the good point that there are different types of grouse moors. How did you define grouse moors, and how did you assess their current condition in the areas that you looked at?

**Professor Werritty:** I will deal with the question about the definition and then invite Alison Hester to comment on the current condition.

One of the first challenges that we faced was the fact that there is no public inventory of grouse moors—there is neither a list nor a map of where grouse shooting takes place, which I found astonishing. That presented us with a huge challenge. The report that was produced for the Scottish Government, which was entitled "Socioeconomic and biodiversity impacts of driven grouse moors in Scotland", provides for the first time some valuable heat maps showing the intensity of grouse shooting. That begins to identify where the activity occurs, but we do not have a detailed inventory or even a map of where it takes place. That is, of course, a major headache for us. One of our recommendations is on licensing, and one of the benefits of licensing would be that such an inventory would be produced for the first time, which would be of enormous value for the public good.

**The Convener:** We would actually know what is happening where, as a result of that process.

**Professor Werritty:** Exactly. At the moment, we do not know what is happening where, because that information is not in the public domain.

Perhaps Alison Hester can speak about your second point, which was on the current condition of grouse moors.

**Professor Alison Hester (Grouse Moor Management Review Group):** The best information on the habitat condition of not just grouse moors but all our land in Scotland is held by Scottish Natural Heritage. I could subsequently provide the committee with more detailed information on its condition. However, as far as I am aware, that information is not disaggregated into grouse moor management versus other land management. For example, the information on the habitat condition of heather moorland would be on all heather moorland and not just on heather moorland that is specifically managed for grouse. I am happy to get back to the committee with more detailed information on what SNH holds, if that is helpful.

**The Convener:** There is a big difference between driven grouse moors and walked-up shooting, and one of the issues is about how to take that variety of practices into account when looking at the matter.

**Professor Hester:** Yes, and that changes temporally. In some years, a small number of grouse estates that normally do driven grouse shooting might do walked-up grouse shooting or they may do no shooting at all. Therefore, as well as the spatial variability, there is temporal

variability, depending on the grouse population each year.

**The Convener:** I open up the meeting to questions from my colleagues.

**Finlay Carson (Galloway and West Dumfries) (Con):** Before we move on, I ask the witnesses how they see conservation status being assessed on a small scale, considering that the existing definitions from the birds directive apply over a large geographical area.

**Professor Werritty:** I am not sure that I understand your question. Could you reframe it?

**Finlay Carson:** You are looking at making assessments in small-scale geographical areas, so how did the group consider that that could be carried out?

**Professor Werritty:** We did not specifically concern ourselves with that issue, except indirectly in annex 4, where, in relation to our recommendation that, during the probationary period, the status of five specific species should be monitored, we identify a mechanism for doing that, specifically in light of the fact that it would involve looking at what is happening on and in the vicinity of grouse moors as opposed to what is happening in Scotland at large. To answer your question, the information that is available across the whole of Scotland, which SNH regularly collects, could be localised as appropriate.

**Finlay Carson:** Okay.

I want to look at the evidence base for any change. The report looks at how we address Scotland's greenhouse gas emissions and climate adaptation, and it states the wish that

“grouse moor management continues to contribute to the rural economy”.

How did you consider the implications of long-term management and investment on farms and estates, and the importance of providing certainty?

**Professor Werritty:** It is very difficult to assess the socioeconomic impact of grouse shooting. That was the subject of a separate Scottish Government research project, which reported just over a year ago—we summarised the findings in our report. In the project's report, it is estimated that, in 2009, the gross value added of grouse shooting to the Scottish economy was about £23 million and that it supported 2,640 jobs, which are in areas in which alternative sources of employment are scarce.

I point out an important qualification in the preamble to the project's report, which says that there was a very narrow evidence base and the data collection was inconsistent, so those numbers must be treated as a first-order estimate. The group faced the challenge that, for reasons to

which I have already alluded, it is extremely difficult to get robust information on the socioeconomic contribution that is made by the sector.

I do not know whether you are anticipating that alternative land uses might emerge in the future, perhaps in response to some of our recommendations. We briefly refer to that in our report. The Scottish Government's project—the work of which I have just summarised—reported in phase 1 and is now undertaking a further investigation of alternative land uses. The group will report in the summer, so I suggest that it would be wise for you to keep your eyes open for that report, which might well provide some of the information on future potential land use changes that you are seeking.

**Finlay Carson:** That is useful. Where does the current and potential contribution of grouse moors fit into Scotland's biodiversity targets? What role should grouse moors play in delivering the Government's targets?

**Professor Werritty:** I ask Alison Hester to speak about the biodiversity targets.

**Professor Hester:** That issue is very strongly in SNH's remit. As with a lot of such matters, the picture is much bigger. Grouse moor management is just one small element of the large variety of land management practices that we have in the uplands of Scotland. It would be perfectly possible to disaggregate some of the figures on actual and potential biodiversity impacts. However, as far as I am aware, that is not being done specifically, because it is very difficult to pull apart information on different land uses.

My answer to the question is that we need to look a little bit more widely at specific elements of land management practice that may be carried out. For example, muirburn is not necessarily just for grouse; it can have wider implications. Going down that line, we summarise in our report the best available evidence about the biodiversity impacts of specific land management activities that can be associated with grouse moor management and, more widely, with other land uses.

From our summaries, you will see that there are still big holes in the information base for all the land management practices that we reviewed. Our recommendations are intended to address those gaps in order to move us forward towards the remit, which was to examine the environmental impact of the different management practices that are associated with grouse moors. The best information that we have on actual and potential biodiversity impacts comes from a combination of our summary on specific land management practices plus the recommendations for the future.

**Finlay Carson:** In simple terms, are you suggesting that further work needs to be done specifically on grouse moors, so that we have a more robust evidence base on the potential impact of reducing grouse moors?

**Professor Hester:** Do you mean the impact of reducing the area that is under grouse moor management?

**Finlay Carson:** Yes.

**Professor Hester:** Yes—for sure. Again, that goes back to the economic question. There are both economic and biodiversity issues. I hope that the review that is being undertaken on the economics will address the very big knowledge gap.

09:45

**Professor Werritty:** There is a link between the question and our recommendations. If our recommendations—particularly the one on the mandatory counting of the number of mountain hares and the culling of mountain hares—are implemented, that will greatly increase our ability to correctly identify the current conservation status of mountain hares. It is impossible to judge that at the moment, because of inadequate data.

If grouse shooting were to be licensed, and if that were successful, the conservation status of hen harriers would be considerably enhanced. They are one of the most persecuted raptor species. If grants were to be offered to estates for the protection of waders, that might protect some of the red-listed waders that are currently under threat. We invite the committee to reflect on that opportunity.

Depending on which of our recommendations are implemented, there could be very positive enhancement of the conservation status of some species.

**Stewart Stevenson (Banffshire and Buchan Coast) (SNP):** I am hearing that the one thing about which there is certainty is that there is considerable uncertainty.

Taking an environmental focus, rather than an economic one, is there a case for having designated reference areas when we try to assess grouse moors? Those areas would be suitable as grouse moors but not used as such, and the suitability would have to be illustrated by the presence of grouse in the natural environment.

I am struggling to see the baseline against which the effect of grouse moors can be measured. Am I aspiring to something unreasonable? Is it something we can invest time, effort and money in creating, so that we have a better base point? As Professor Hester correctly

said, we can look at individual activities and at what they do, but, in the aggregation of the whole, there will be interactions between all the things that we do. Am I aspiring to something that is just impossible?

**Professor Werritty:** Are you inviting us to think of another environmental designation on top of everything else that we already have?

**Stewart Stevenson:** No, I am not being as specific as that. If you think that that is the answer to my question, I would be interested to hear it. I simply mean that there will be areas of Scotland where the terrain and biodiversity are suitable for grouse moors, and where there may be some grouse. I regularly see grouse walking on the roads near where I live, in a rural area with no grouse shooting. Are there reference areas against which, over time, we can track how grouse moors grow either to differ from, or to converge with, natural environments that would be suitable for grouse?

**Professor Hester:** That goes back to the idea of specific land management activities. We spend a long time in the report explaining that it is difficult to define what is meant by a grouse moor. It is a question of land management activity. It is immensely valuable to be able to compare two areas of land that are bio-physically similar but have two very different land management practices. You could connect that to grouse moorland management by looking at which area does not have any muirburn and which one does or at whether an area has any control of predators.

I generally like the direction in which you are going, but I would attach it to comparison of specific land management activities instead of trying to compare an area that is an active grouse moor with one that is not. Even if you could do that—which would be hard—you would not get at the cause of the difference, which is the land management activity and the impact that that makes.

**Stewart Stevenson:** Are we also saying that not all grouse moors are the same and that they are managed in a variety of ways?

**Professor Hester:** That is correct, which is why it is very clear that we need scrutiny of actual land management practices to work out what impact they have.

**Stewart Stevenson:** However, going back to the principal point that I am making, we will be able to convince laypeople such as elected politicians and others only if we are able to compare interventions. Therefore, in moving forward, we need reference areas, where the management is comparatively static. Is that what I am hearing?

**Professor Hester:** Yes. We certainly need to look at the impacts of changes in land management—I absolutely agree.

**The Convener:** Is it fair to say that one of the issues is the fact that there is a tension between the targets and aspirations that we have on the climate emergency, the biodiversity situation and issues such as peatland restoration, and practices such as muirburn and the condition of driven grouse moors, which could affect our reaching those targets with regard to re-wetting peatland and so on? Without licensing, how can we assess whether too much environmental damage is being caused that is affecting things such as peatland restoration and biodiversity? Without licensing, how can we possibly have a picture of how much is being done?

**Professor Hester:** Let us take the example of muirburn. We have very good maps of the extent, condition and location of peatland. Those are held mostly by SNH, but a lot of the data was collected by the James Hutton Institute. We have extremely good data on peatland location and condition, as well as priority targets for restoration. The connection with muirburn can be readily made, because it is possible to assess where there is a potential conflict between areas that are being actively burned at the moment and their proximity to peatland areas. The muirburn code contains an explicit requirement not to burn peatland areas, but one of the points that we make in the report is that that is not actually checked and there is currently no penalty. The recommendations that we make on licensing muirburn as a single land management activity would directly address your concern.

**The Convener:** I will bring in Claudia Beamish, after which we will go back to Finlay Carson.

**Claudia Beamish (South Scotland) (Lab):** The helpful answers that have been given have partly covered what I wanted to ask about.

I have a broader question. To what degree were your remit and recommendations framed by the climate emergency? I appreciate that the new targets for 2045 and the new interim targets were introduced in the Climate Change (Emissions Reduction Targets) (Scotland) Bill when you were well into your report, but to what degree were you able to assess matters in that context? How did that work?

**Professor Werritty:** The remit that we were given by the Scottish Government, which is itemised in very precise terms—I summarised it earlier—does not explicitly relate to the climate emergency or the conservation emergency.

At our first meeting, we spent quite a lot of time discussing whether we should enlarge the remit, and we looked at a number of options. We

decided—with the benefit of hindsight, it is clear that this was the correct judgment—that we wanted to follow the remit as it had been presented to us and not extend it. If we had taken the remit into some of the interesting areas that you have identified, that would have imposed a huge extra burden on our evidence gathering. After two years, I think that we have done more than enough just in focusing on what we were explicitly invited to focus on.

Therefore, although we refer to the climate emergency and the conservation emergency in the background section of the report, they did not explicitly form part of the work that we were invited to do.

**Claudia Beamish:** But, with respect, you have already highlighted the burning of deep peat.

**Professor Werritty:** We mention that in the summary of scientific evidence, in which there is a whole section on the link between climate change and muirburn. Where we felt that the two issues that you have raised were pertinent to our more narrowly conceived reading of our remit, we reflect on those issues, but we do not explore the wider public policy implications of some of our recommendations, because I think that that would have been far too challenging for us.

**Professor Hester:** One thing to say that I think will address your question is that one of the reasons for recommending codes of practice throughout the areas that we examined is to allow the Government to be very specific about targets, including some of the new ones that have come in. For example, a requirement to ensure that muirburn does not contribute greenhouse gas emissions of more than X can go explicitly into a code of practice. As long as the codes of practice are regularly updated as new information comes in, which can include explicit new requirements and targets, all those activities will sit in the best and most up-to-date codes of practice and requirements. That does not directly address the targets, but it is a mechanism through which the Government can ensure that those requirements are also incorporated in the codes of practice—does that help to address your question in that respect?

**Claudia Beamish:** Correct me if I am wrong, but what I understand you to be saying is that that would not be static, because the science and the evidence move.

**Professor Hester:** Yes, that is right.

**Claudia Beamish:** I think that another member is going to discuss the evidence basis with you, but that is helpful.

**Professor Hester:** The muirburn code is the best example so far, because that is the one that



has been around the longest and it is regularly updated as new information comes in. We have explicitly recommended that all of them are updated regularly, so that they are living documents and give the best available information that we have at any time.

**Finlay Carson:** The idea of a code of practice is generally welcomed. However, one of the main recommendations on the licensing scheme—I know that some of my colleagues will delve into that a bit deeper—is subject to caveats on the raptor breeding population within five years, but there has been a suggestion from the cabinet secretary that the period could be as short as three years.

Given what you have already said, how can a test be fairly formulated that will show a marked improvement in ecological sustainability when, as we have heard, there are so many different factors that affect the breeding of, for example, hen harriers? We have seen figures showing that the breeding of hen harriers is far poorer on RSPB-managed land than it is generally. How on earth can you come up with a fair test in a period as potentially short as three years?

**Professor Werritty:** Of course, we recommended a period of five years precisely for the reason that you have just alluded to. We felt that five years would give a reasonable interval of time to take into account climatic variability year on year and the ability of various breeding populations to be more successful in some years than others. Five years was quite specifically identified to address the concern that you have come up with and, as chair of the group, I stick with that five-year probationary period, as stated.

**Mark Ruskell (Mid Scotland and Fife) (Green):** Could we come back to the option of the licensing of grouse shooting and the decision making on that? I will ask first about the decision-making process. There seemed to be a strong emphasis on the need to get unanimity and consensus. Did adopting the principle that you wanted to get consensus compromise the clarity of your recommendation?

**Professor Werritty:** The composition of the group was carefully balanced. If you look at the membership of the group, you will see that we had two conservation scientists, two individuals reflecting the shooting interest, and Colin Reid and me as independent academics. Given the composition of the group, achieving a unanimous recommendation in this area was always going to be extremely difficult. We took the collective view that unanimity on our main recommendation was crucial. If members of the group had dissented from agreeing to the main recommendation, it would have been severely weakened and its authority very much undermined.

That said, you will note that it is the only main recommendation that we came to unanimously—the rest we arrived at largely by consensus. We very rarely voted, but on that one we agreed unanimously.

10:00

If you read carefully what I have written about how we conducted that debate, you can draw an important inference: those who reflected the sporting interest—you should note that I am saying that they reflected and did not represent the sporting interest on our committee—are saying in effect that, if the probationary period has failed to achieve the desired goals in five years' time, they are signing up to licensing. Given the current state of the debate, that is a major step forwards across the sector. Therefore, I think that grounding our main recommendation in unanimity and how we went about achieving that have given us a much more robust and authoritative recommendation at the end.

**Mark Ruskell:** You have explained the five-year probationary period in terms of the evidence that the group considered and agreed by consensus would be needed over that period. Where does that leave us in relation to the European habitats directive, if there is an implicit assumption in the recommendation that species are under threat because of the activities of driven grouse moor shooting? You explicitly had concerns about golden eagles, harriers and peregrines. If the understanding is that those species are being impacted, is it acceptable that we allow already comprised populations of protected species to continue to be compromised over a five-year period in order to get consensus over what is a reasonable amount of time to study whether their status is improving? Perhaps Professor Reid could answer that, given his European expertise.

**Professor Colin Reid (Grouse Moor Management Review Group):** There are two elements to that question. First, we are not allowing what you are suggesting, because that activity is unlawful. The law already prohibits it, so it is not that we are encouraging or allowing interference with birds to continue without legal measures, albeit that we accept that there are enforcement problems and so on.

Secondly, when coming to the wider issue, you again hit the issue of national against local populations. Many of the birds are doing all right on a national level—perhaps only hen harriers are not—even though there are local problems. Given that, and given that we have law in place to deal with direct actions, such a major step as potentially stopping certain land uses did not seem appropriate.

**Mark Ruskell:** I will continue to ask about the probationary period, because I am interested to know exactly why you decided that it should be five years. In its initial response to the report, the Government has already suggested that it may move quicker than that. Why was a five-year period chosen? Politically, that would take us into the next session of Parliament. Therefore, if a licensing scheme was to be devised, it would be at the back end of the next session. Why not a four, three or two-year period, particularly given the evidence base that we have from raptor study groups around Scotland?

**Professor Reid:** The length of time has to be tied to the test. We have already talked about the incredible variability between single years. Five years seems to be a period that is short enough and gives people time to respond to the proposals, to make the changes in management and for some effects to be seen. With a two-year period, there would still be the effect of what is being done this year in many activities. To choose a period beyond five years would be stretching things too far and giving people too much time. A five-year period seemed in our discussions to be an appropriate balance between the various considerations.

**Mark Ruskell:** How would you envisage the licensing scheme working? Was there consideration of what monitoring role SNH would play? Does it have the correct resources at the moment to roll something out?

**Professor Reid:** If there is to be licensing, I was very struck by the differences between the powers that SNH has compared with those of the Scottish Environment Protection Agency and even Marine Scotland, in terms of the range of licensing tools, regulations, binding rules and remedies, such as fixed penalties and enforcement undertakings. There is a need to consider the overall powers of SNH across the range of those things and to give it greater flexibility to respond more proportionately to different issues.

On the issue of a licensing scheme, we certainly do not envisage that there would have to be an individual application covering all aspects every year; rather, we envisage the flexibility that is seen in other areas—such as some wildlife areas—whereby some things are more or less automatically approved under a general licence. For example, if you had a management plan and you did everything in accordance with that plan, there could be a portmanteau licence that would allow you to do a range of activities; it would tick the box for several things.

As I said, some licences could be given more or less automatically, but with the potential for their being withdrawn, or tighter controls being put on them, if there were evidence to suggest that that

was necessary. We want to see a licensing scheme that is more flexible and responsive than a black-and-white scheme whereby you have to apply every year to get a licence.

**Mark Ruskell:** Which elements do you see coming into such a licensing scheme? The report talks about areas of codes of practice that may be put on a statutory basis, and about areas of licensing in relation to muirburn. Do you see an overarching licence arrangement for driven grouse moors, or would there be licensing only for the shooting aspect, and then piecemeal progress—or not—in other areas, according to whether you think that compliance requirements are being adhered to?

**Professor Reid:** I have a slightly different vision. Some issues, such as muirburn in particular, apply outwith grouse moors as well, so they have to be taken separately, but, nonetheless, the idea would be for the different licensing schemes to be connected such that, if you had your grouse licence, and its arrangements included authorised muirburn, that would give you your permission. You would not have to get a separate muirburn licence, in the same way that the approvals for major energy projects include the planning permission that would otherwise be necessary to obtain.

The different schemes can be fitted together in ways that achieve efficiency from the point of view of both the regulator and those who are subject to regulations, in that they are subject to some oversight without being overly burdened. Although we did not go into the details of designing a particular scheme, there is a lot of work to be done to produce a system that works as well as it can for all sides.

**Claudia Beamish:** I put this point to anyone on the panel who wants to respond to it. Some of the issues that the review considered, such as raptor persecution, have been intractable problems for a number of years. Given that, it is difficult for me to grasp what a good and well-managed driven grouse moor estate has to fear from an overarching licensing scheme; I am not sure what those estates have to fear if they are doing things in a way that is appropriate.

**Professor Werritty:** If I may turn Claudia Beamish's question around slightly—

**Claudia Beamish:** As long as you do not ask me a question, professor, that is fine. *[Laughter.]*

**Professor Werritty:** Let me answer your question in this way. Recommendation 6 states:

“as much as possible should be done to change the culture of grouse moor management to accept more loss of grouse to avian predators.”

That is at the heart of what Claudia Beamish just spoke about. If grouse moor estates were willing to allow a certain proportion of their shootable surplus to be available for avian predation, a lot of the tension around the illegal persecution of raptors could begin to be alleviated. Our understanding from the British Association of Shooting and Conservation is that that is already happening with lowland shoots. Without going into the details of the rights and wrongs of lowland shoots, I will say that it appears that many lowland shoots produce far more pheasants and partridges than is deemed to be necessary for the shooting interest and allow as much as 30 per cent for avian predation. If there were that change in the mindset of grouse moor managers in allowing the raptors a fair—as it were—availability of grouse, some of the things that Claudia Beamish pointed to could be addressed.

**Claudia Beamish:** What is your perspective on the issue of vicarious liability?

**Professor Werritty:** When we took evidence, we tried to ascertain whether vicarious liability had had an impact. Colin Reid can correct me if I am wrong, but I think that we received rather equivocal answers. Some people indicated that it kept them awake at night; others indicated that it had had no impact at all. It is difficult to assess the impact of the new legislation.

**Professor Reid:** Some people felt very strongly that vicarious liability had produced a major change in mindset, and that owners were suddenly taking a lot more interest in what was going on. Others were more sceptical about it because, at the end of the day, the whole thing depends on prosecution, and the problem is less about the legal provisions and more about detecting and taking to court the relevant cases.

**Stewart Stevenson:** I have now got so many questions that I will have to try to be focused. Are we licensing the land, the land manager or both?

**Professor Reid:** That is one of the issues that we faced. The remit talked about licensing grouse-shooting businesses, which do not exist as such, because some do not shoot on a commercial basis at all, and in many others the business is hugely integrated with all the other bits of the estate. In our discussions, it looked as if the shooting of grouse was the focus that you could have for licensing. As you say, there is then the issue of whether the estate gets the licence, or whether particular managers or owners get it. I suspect that, given that the shooting is based on location, and our laws on hunting game and so on are location based, it would be a licence for the site rather than the individual. Obviously, however, when an application was made to get a licence for the site there would be issues about who was in charge. If you think about waste sites, it is the site

that is licensed, but there are conditions on the operator as well.

**Stewart Stevenson:** Of course, the owner of a weapon requires to have a licence, but they may hand the gun to be used by someone who does not have a licence. That is just an observation—I do not think that there is a question in that.

Professor Werritty raised the more general subject of a proportion of the grouse stock being available for predation, which interacts with the debate about rewilding. As a side comment, I would take a lot of persuading about reintroducing wolves or bears. Clearly, wolves and bears would have to eat something. You mentioned a figure of 30 per cent. Was that an informal comment or an informed comment?

**Professor Werritty:** That is a figure relating to lowland shoots that we were presented in one of our evidence sessions.

**Stewart Stevenson:** Right. Is it 30 per cent for mountain hares as well?

**Professor Werritty:** No. That is purely—

**Stewart Stevenson:** So it is somebody else's figure.

**Professor Werritty:** Yes.

**Stewart Stevenson:** That is fine—it is perfectly permissible.

This will be my very last question, because others are queueing up behind me. How long do hen harriers and golden eagles live?

**Professor Werritty:** I do not know the answer to that question, but I can find it out for you. I would be happy to oblige.

**Professor Reid:** I think that golden eagles live into their 20s. It is usually about six or so years before they are fully mature and start breeding, which would suggest decades.

**Stewart Stevenson:** I am kind of relating that to the five-year probationary period, without knowing how to.

**The Convener:** Rachael Hamilton has a question on the current regulations.

**Rachael Hamilton (Ettrick, Roxburgh and Berwickshire) (Con):** Before I ask about that, I want to pick up on the socioeconomic impact, which was touched on by Finlay Carson. You said that your data was not robust with regard to the contribution of grouse moors and sporting activities to Scotland's rural economy. Have you been able to look at the impact that the introduction of a licensing scheme would ultimately have on the rural economy? Would the policy changes have a detrimental financial impact,

perhaps involving a lack of investment? Would there be an impact on biodiversity?

10:15

**Professor Werritty:** Any assessment of the economic impact of the implementation of recommendations on licensing is extremely problematic. We did not even attempt to go down that route.

One reason is that, in terms of precise numbers, the current economic impact on grouse shooting is already very unclear. As I said earlier, the Scottish Government report is our first attempt to address the current socioeconomic impact, but it needs a lot more refinement to become authoritative.

Therefore, it would be very difficult to project a perturbation to those figures that would be induced by a change in the management style resulting from licensing. Any environmental economist would see that as a very significant challenge, and it is one that we did not feel that we had either the capacity or the remit to fully address.

**Rachael Hamilton:** Does that difficulty also apply to considering the impact on the richness of our biodiversity in Scotland?

**Professor Werritty:** Biodiversity can be more readily addressed. Alison Hester can perhaps reflect on what that impact might look like.

**Professor Hester:** I will precis what I think you are asking, to be sure that I am answering the right question. Are you asking what the impact of the introduction of licensing might be?

**Rachael Hamilton:** Yes.

**Professor Hester:** If a land manager is currently managing their land according to the best available knowledge, which may be drawn from the codes of practice, a licensing scheme should make no change—plus or minus—because that land is already being managed as well as it can be. A change should only occur if the land is not currently being managed in the best possible way. Anyone who is managing their land well should not see any change if the licensing scheme is introduced.

**Rachael Hamilton:** I will move on to the current stringent legislation in Scotland to deal with wildlife crime, which might be strengthened through the Animals and Wildlife (Penalties, Protections and Powers) (Scotland) Bill. What is your assessment of regulators' current powers and how they are used? If a licence is introduced, will there continue to be a problem with attributing wrongdoing? Did you look at voluntary controls?

**Professor Reid:** The difficulty of attributing wrongdoing in this area is intractable. Moving to a licensing scheme, rather than a criminal scheme,

does not avoid the problem. There has to be attributable evidence and an evidential basis for taking action that will have a significant impact on either direct criminal liability or limiting or removing someone's licence. Introducing a licensing scheme opens up the possibility of a slightly lower burden of proof. There is still one, but it is lower and is no longer based on reasonable doubt but on the balance of probabilities. An evidential basis is still needed.

As I suggested earlier, a licensing scheme also opens up a range of more flexible, proportionate remedies that might be quicker and easier to implement, but would still have some effect. Relying on reporting a case to the procurator fiscal means that it can take a long time to deal with an issue. The procurator fiscal has to fit the case into their busy schedule in order to get it before the court, and cases can drop out of the system at a number of stages. It should be possible to devise a licensing scheme in which the remedies are quicker and more effective, but the initial hurdle of needing some substantial evidential basis before taking action would still be there.

**Rachael Hamilton:** How would the licensing scheme be implemented? I know that you are sitting on the fence about whether it would help to attribute wrongdoing and get that burden of proof, but, realistically, how would it be monitored?

**Professor Reid:** Across the whole package, certain activities would be subject to more direct control. If someone was going to be shooting mountain hares, they would have to report the count and that they were doing it. If they were proposing muirburn, they would also have to report that, so we would know what was happening there. Several elements would be dealt with.

The hard thing to tackle is the deliberate wrongdoing by people who go out of their way to hide the evidence that they have done something wrong. That is at the heart of the problems affecting raptors. It is a really intractable problem. Unless we have a policeman on every half mile of hillside, it is really difficult to get around that problem and an extra layer of law will not solve it, as SNH is showing in its use of the power to limit general licences. SNH can take action where there is evidence of a very clear pattern of behaviour. That would be available under a licensing scheme, but there still needs to be some evidence behind such a decision. We cannot simply say that there is a problem in general, across a whole area.

**The Convener:** Members have questions on the specific recommendations.

**Stewart Stevenson:** Muirburn is a land management tool to change the environment to make it more suitable for grouse, in terms of

available food and refuge. However, now that we understand the substantial climate impact of muirburn, should we be doing it at all? Should we revert to having grouse where they are able to thrive naturally, in an unmodified environment? We know that there are grouse in unmodified environments. In other words, in our understanding of the overall environmental impacts, has the balance shifted between the benefits of muirburn—to grouse, the economy and otherwise—and the downside of the activity?

**Professor Hester:** We need to take it back to the fact that muirburn is not just done for grouse management. I will relate that back to climate change, which was a key part of your question. Increasingly, it is also possible that burning areas of heather may act to reduce the likelihood of severe wildfires. We are very supportive of the current work of the Scottish Fire and Rescue Service to try to get a better handle on the possible use of controlled muirburn as a way of reducing wildfire risk. We also support the Scottish Government's funding to bring in a fire danger rating system, which would give very important information about when a fire is likely to be damaging and when it is not.

We are very aware that there are still potential benefits of burning heather and that we are not clear enough about those yet. However, the activities that are already on-going should help us to better understand the potential benefits—in contrast to the detrimental impacts—of muirburn. Everything is moving in the right direction and, with the fulfilment of the current research activities, we will be better able to answer the question that you are asking.

**Professor Werritty:** If muirburn were to be prohibited in the way in which you are speculating, Mr Stevenson, it would have a severe impact on the ability to raise a shootable surplus of grouse, so it would have a very adverse impact on the commercial viability of a shoot. The whole purpose of muirburn is to produce young heather growth, which is essential for the young grouse at an early stage in their development.

**Stewart Stevenson:** It is interesting to note that the response of the native population of Australia to the current difficulties there has been to say that there should have been burning to create natural fire breaks and reduce the build-up of natural debris at the bottom of trees. There are good arguments for proper burning.

That takes us to the question whether the rules governing muirburn are good enough or whether we need to revisit them. Muirburn is a seasonal activity—it cannot be done for 12 months a year. Should the rules be more restrictive or should they focus more on the objective of a particular

muirburn programme, such as protecting us from wildfires?

**Professor Hester:** Again, I go back to the review group's strong recommendation that the muirburn code of practice should be updated regularly. We have a collective responsibility to ensure that the code, together with the annexes that address specific questions, sets the best possible direction so that if muirburn is carried out somewhere for whatever purpose, there is absolute clarity on how best to do it in order to minimise the detrimental impacts. Does that answer your question?

**Stewart Stevenson:** To be blunt, I suspect that it is the only answer that is currently available.

**The Convener:** Mark Ruskell has questions on muirburn in particular.

**Mark Ruskell:** I take a slightly different view from Stewart Stevenson's. We live in quite a wet country, unlike Australia, and we have active peatland habitats with sphagnum moss. Does there need to be a shift in focus away from muirburn towards rewetting? Where do you see that agenda fitting in? Muirburn is a specific practice that involves developing heather and the shoots and grass that can be eaten. Where does rewetting and peatland restoration fit into that picture?

**Professor Hester:** What do you mean by rewetting?

**Mark Ruskell:** What it says on the tin, really: ensuring that peatland soils and deep peat have a high moisture content, and that the water table rises to enable the active regeneration of peat bogs through sphagnum moss.

**Professor Hester:** Are you including that within peatland restoration? Are you taking rewetting and peatland restoration to be one and the same?

**Mark Ruskell:** Within the regeneration of peatland soils, yes. I am interested to hear your view, from an academic perspective, on where you see that sitting within the wider management of land.

**Professor Hester:** Where we see peatland restoration sitting?

**Mark Ruskell:** Yes, and the rewetting of soils.

**Professor Hester:** Peatland restoration is absolutely critical. We already have the peatland restoration tool, which is fantastic. It is underpinned by the best available scientific data on where the peatlands are most degraded and the potential impacts on greenhouse gas emissions and so on. That enables the Government to target its priority activities to restore peatlands.

**Mark Ruskell:** Is muirburn compatible with that work?

**Professor Hester:** No—muirburn is not compatible. The code of practice already states that peatland should not be burned.

**Mark Ruskell:** I am talking not about the soils but the plant assemblages that grow on those soils. Are you saying that muirburn is incompatible with that work?

**Professor Hester:** On peatland? Yes, absolutely. That is stated explicitly in the code.

**The Convener:** Angus MacDonald has questions on some of the group's other recommendations.

**Angus MacDonald (Falkirk East) (SNP):** The report states that

“use of medicated grit should be subject to increased regulation”,

with a voluntary code of practice, and a system of licensing if such a code fails to be effective. I have received anecdotal evidence that suggests that the current guidelines are not always routinely followed. For example, there is a question about whether landowners are ensuring that medicated grit is not ingested from 28 days before the grouse are shot.

There is also evidence that prescription levels are too high in red grouse, and that flubendazole is toxic in aquatic organisms. If the guidelines are already failing in some places, is that not an argument that we should go straight to licensing? There is, in effect, already a voluntary code of practice, but it is not working.

10:30

**Professor Werritty:** It was interesting to consider medicated grit after we had considered issues to do with muirburn and mountain hares. In each instance, we did an implicit risk assessment of what was necessary to produce ultimately beneficial outcomes.

When it came to use of medicated grit, our risk assessment went along the lines of giving the sector the opportunity to improve, under a voluntary code of practice, in all the areas that had been identified, and which we listed as concerns. That should be monitored by SNH, which should have ownership of the code, and have the power to check that the code is being followed, to look at documents and to inspect sites. If, after five years, there is still demonstrably poor compliance with the code, licensing should be introduced.

We collectively made that judgment on risk assessment, but we are looking for regulation of an area that has hitherto been largely unregulated. There have been codes of best practice, but

nothing more. This comes down to a point that I would like to expand on more generally: unless there is monitoring of compliance with codes, they are largely ineffective. That is a huge issue—not just in relation to medicated grit, but across all the codes of practice that we have been talking about. Unless SNH has ownership of the codes on behalf of the Scottish Government, and has the resources to monitor compliance, the systemic change that we are looking for will not happen.

**Angus MacDonald:** Monitoring by SNH is all well and good, but was there any discussion of whether the Scottish Environment Protection Agency should monitor use of medicated grit?

**Professor Werritty:** We have made a specific recommendation on that. Recommendation 23 is

“That SEPA should initiate a desk-based study ... to ascertain whether flubendazole residues exist in water bodies on or downstream from where it”—

that is, medicated grit—

“is being used”

and

“to conduct such a monitoring programme”

to ascertain whether there are toxicity implications that need to be regulated by SEPA. That is a specific recommendation from our list—SEPA should pick up the threat to aquatic organisms.

**Angus MacDonald:** Thank you; I had missed that. It would be good if we could get from SEPA an indication of whether it is prepared and when it might do that work.

**Claudia Beamish:** I will ask about mountain hares in relation to your remit. Where are things at the moment and where do you see them going regarding the possibilities that have been suggested on further evidence and on a potentially clearer system of reporting on the appropriateness of culls? There is a public perception; it is disturbing for the public to see pictures of rows of dead animals that have forms of protection that we all know about. Whether or not animals have forms of protection, they are being lined up, having been slaughtered. Could you explore that issue, please?

**Professor Hester:** The mountain hare is subject to specific conservation designations—I will use that term for now—and the most recent assessment of its population status is not good. Also, it is very clear that information about the population status of the mountain hare is not robust enough.

Among our package of recommendations, we recommend a way of addressing that lack of robust information on the population of mountain hares that would require that anyone who shoots hares must report not only the population density

of the hares prior to shooting but the exact number of hares that are shot each year. SNH could keep and administer the data, which would allow it to make much more accurate assessments—first, of the real population status of mountain hares and, secondly, of where the hares are shot and the subsequent impacts on population, bearing in mind that we know the cycle of populations of hares.

The basis for our package of proposals for mountain hares is that we first get a handle on the population status at the same time as we get compulsory returns of information on how many are being shot.

**Claudia Beamish:** Am I right that that would be the case whether or not a broader licensing regime was proceeded with?

**Professor Hester:** Yes.

**Claudia Beamish:** That is what I thought. Do the other panel members have any comments on that?

**Professor Reid:** Mountain hares is a good example of an issue on which it would be wrong to look at grouse moors in isolation. Why is the population of mountain hares possibly falling in Scotland? Well—they do not like living on land that has been afforested, they do not like land that has been rewetted and restored as peatland, and they do not like living on agricultural land. Therefore, if we are looking at the causes of the decline in population, we have to consider not just grouse moors and shooting of hares.

**Professor Hester:** In the report, we were explicit that issues in relation to hares go much wider than grouse moors.

**Claudia Beamish:** I assume that you are not suggesting that that should reduce the need for reporting, as set out in the recommendations.

**Professor Reid:** Absolutely not—reporting has to be wider. That relates to a point that has come up several times in today's discussion: it does not make sense to look at grouse moors in isolation, because the issue is tied into much wider conservation, land use and socioeconomic issues. As has been explained, we thought about that and decided that we needed to stick to our remit and keep the report narrow. There are much wider questions—about the acceptability of killing any animals, about predator control in any place, about land use management, and about our vision for the uplands and our vision for conservation. All those things are connected; the issues to do with grouse are just one small part that cannot be looked at in isolation.

**Professor Werritty:** We also recommended, in the context of mountain hares, a count of the numbers present and the numbers culled, so that

we could monitor numbers and, through adaptive management, the estates could, in consultation with SNH, agree on a sustainable cull. At the moment, we do not know what that number is. The approach that we have recommended will give us an opportunity to ascertain what is an appropriate cull that will not threaten the sustainability of local populations.

**Claudia Beamish:** I take it that that would mean an evidence-based report to SNH through sections of land having been checked, in order to get a wider picture.

**Professor Werritty:** I am sorry—I did not catch that.

**Claudia Beamish:** I assume that there would have to be a scientific reporting mechanism.

**Professor Werritty:** Yes. SNH has developed a new way of counting mountain hares, which has been broadly welcomed across the sector and is being rolled out. Once that methodology is accepted more broadly across the sector, we will have a consistent way of counting mountain hares and we will have reliable reports on the numbers that are shot in any given year, so that the process of negotiation on the appropriate level of culling will become a way forward.

**The Convener:** I will move on to some of the other recommendations. We have talked a lot about regulations, and about monitoring and policing of adherence to codes of practice. However, you have also made a number of recommendations that aim to incentivise good practice. For example, you talked about changes to rural payments support. Will you take us through some of those recommendations?

**Professor Reid:** The rural payments system is complicated, so we did not go into all the details and the ins and outs of it, but the big picture is that for some forms of land use—afforestation, renewable energy and agriculture, for example—considerable public support is available. That has a huge impact on the economic side. However, grouse moor management tends not to be eligible for such support. Even where certain activities might fall within schemes, some estate owners choose not to take up the opportunity to take public money, so that they stay outside the system altogether.

To come back again to the broader vision and picture, I say that given that we spend a lot of public money on agriculture to ensure that it is done in a way that meets our environmental and conservation objectives, it seems to be a bit odd that another big land use does not receive the same support. The details would have to be worked out, but there is a notable mismatch.

**The Convener:** In the same vein, you mention softer interventions, including training and accreditation in a number of areas. Can you give us an idea of where that sits?

**Professor Reid:** We know from speaking to people in that area that there is growing professionalisation of gamekeepers, land managers and so on, and that their training has become more diverse so that it includes a wider range of things, including conservation and wildlife. That is certainly not universal—there are still some old-school people around—but that is a development that we want to encourage. We believe that making sure that there are training requirements and that people know that the good knowledge in the codes of practice is being put in place is one way of helping to bring about the culture change that we think is important.

**The Convener:** Rachael Hamilton has some questions on tagging.

**Rachael Hamilton:** Before that, I have a quick follow-up. Will there be an accreditation scheme? If so, how will it be delivered?

**Professor Reid:** There are possibilities. The training on snares that is needed is an example of how that can be done. At one stage, we thought about having an accreditation scheme for grouse shoots as a whole. In some ways, that would have provided a useful package for tying together all the different things that we are doing, but it was our sense that having an accreditation label would not make enough difference to the people who come to shoot.

There are possibilities, but it will probably be necessary for a more fragmented approach to be taken that will involve looking at particular activities and particular uses.

**Rachael Hamilton:** I want to move on to the issue of satellite tagging of birds of prey. Do you believe that the transparency and bolstered regulation will restore public confidence?

**Professor Reid:** I seem to end up at lots of meetings at which that topic gets talked about. Progress is being made. There seems to be greater willingness to do what is needed to make sure that information gets passed on to the authorities quickly, and, because the tags themselves are getting better and more responsive, they can provide data more quickly. They also allow for better discrimination between causes of failure, including whether it has been caused deliberately or accidentally.

It is an evolving area. All the people who are involved seem to be discussing with one another how to get the best out of the technology, but it will take a bit of time, and maybe a bit of trial and error, to work out which system works most

effectively. When we started the review, two and a half years ago, the issue was just coming on to the horizon and people were starting to talk about it. Great progress has been made to ensure that the information flows quickly and that there is a better understanding of what can and cannot be got from the information. It is still work in progress, but progress is definitely being made.

**Claudia Beamish:** I have a brief supplementary question on the issue of subsidies. I am slightly confused, because, as I understand it, the purpose of subsidies for anything, but for rural Scotland in particular, is to support the public interest and the public good. It could surely not be said that driven grouse moors are in the public interest and serve the public good; they are for the sport of the few. I do not understand how the subsidy system relates to that in the way that, in agriculture, it relates to issues such as conservation and tackling the climate emergency.

**Professor Reid:** As well as the downsides, grouse moor management has some conservation benefits. By controlling predators and maintaining open moorland, it produces a habitat that, for some species, is a good thing. Equally, not afforesting the land might affect water resources, drainage, water storage and so on, so it would have to be done on an individualised basis. There are pluses and minuses.

Scotland's upland landscape has been managed in one way or another for centuries. We must decide what we want to manage it for. If we want to have open moorland of the right sort, maybe we should support that, if that is the public benefit that we want to achieve.

**The Convener:** We are running out of time, but I will allow a quick supplementary question from Stewart Stevenson before Finlay Carson asks his questions.

10:45

**Stewart Stevenson:** I just want to check something. Professor Reid, you mentioned licensing for the setting of snares, which comes under the Snares (Training) (Scotland) Order 2012. The issuing of certificates is done by a range of bodies including BASC. Do you envisage that the same approach will be taken in this context?

**Professor Reid:** If there is going to be a training requirement, it seems sensible to have different bodies doing the training. There might be different ways for people to get it, which is fine as long as there is a system to check that the providers are appropriate. Rather than have a single national scheme, it makes sense to take advantage of the expertise and the networks that are available.



**Finlay Carson:** Going back to licensing, I note that you, as the chair, did not use your casting vote to make a decision for or against licensing. In the light of the evidence that suggests that licensing grouse shooting would be problematical, is there a belief that the additional recommendations on regulation and the other interventions, including financial support and increased regulation of satellite tagging and so on, could result in there being no need for licensing? Would the panel welcome that? Is that the general direction that you have moved in?

**Professor Werritty:** Can I clarify the point that you are making? Are you inviting us to revisit our first and main recommendation?

**Finlay Carson:** Yes and no. The group came to a consensus on the list of recommendations, and they have been widely welcomed. However, in discussing the decision on licensing, the report states:

“at a societal level the final decision is ultimately a political one.”

Would the group prefer that the outcomes that we all wish to see are ultimately achieved by better regulation, better training and accreditation and the other things in the recommendations rather than through a licensing scheme?

**Professor Werritty:** I think that the group stands by that first recommendation as it is stated. It was hard fought. It was a tough recommendation to build a consensus around. As I said, we are, in effect, giving the sector an opportunity to demonstrate that it can clean up its act such that estates that are not compliant become compliant. Should that happen, the persecution of raptors will diminish strikingly, which is the public good that we are all seeking to promote.

I would not want to revisit that recommendation at all. It stands as it is stated.

**Finlay Carson:** Okay. Thank you.

Finally, do you have any comments on the longer-term implications of the broader Scottish Government land use policy and the potential future direction of travel, given what we discussed earlier around climate change and so on?

**Professor Werritty:** As I said in response to an earlier question along those lines, we deliberately narrowed our focus in order to make our deliberations as manageable as possible, but there are those wider ramifications. What I would like to say to you and more publicly—the point has been made repeatedly by my two colleagues—is that we need a more joined-up approach across the whole of the management of Scotland’s moorlands and uplands.

Grouse shooting is just a small, specific sector whose problems we have addressed in the review. In my judgment, we now need to look back to the review that I produced for Scottish Natural Heritage in 2015, in which we looked at all the issues of sustainable moorland management. In that report, I recommended that we need a vision for Scotland’s uplands that is tied in with the land use strategy. Until we have that vision and get all the key players to sign up to it, it will be extremely difficult to achieve the linkages with the climate emergency, the ecological emergency and all those other issues.

Our group dealt with just one specific arena, but we are mindful of the linkages out to those larger public policy issues. We would welcome this committee taking those linkages on board and seeking to promote them in whatever way you feel is appropriate.

**The Convener:** We have time for a short question from Mark Ruskell to round things off.

**Mark Ruskell:** It is on the back of Finlay Carson’s question. If you had pushed the question to a vote, would there have been a majority for licensing grouse shooting?

**Professor Werritty:** The vote was three in favour and three against—as I indicate in the report, we were evenly split. As the chair, I sought to exercise a casting vote. That was robustly contested, and, in order to achieve a unanimous recommendation, for the reasons that I have already elaborated on, we went with the recommendation as published.

**Mark Ruskell:** Personally, you would back the licensing of grouse shooting. That is your personal view.

**Professor Werritty:** In this arena, my personal view is irrelevant. I am the chair of the group and I am expressing its view.

**The Convener:** I thank the three of you for the time that you have spent with us this morning. It has been very interesting. Thanks for answering all our questions.

## **Decision on Taking Business in Private**

10:51

*Meeting continued in private until 12:17.*

10:50

**The Convener:** Does the committee agree to take item 3 in private?

**Members** *indicated agreement.*

**The Convener:** At our next meeting, which will be on 28 January, we will consider a number of Scottish statutory instruments and will continue our consideration of our stage 1 report on the Animals and Wildlife (Penalties, Protections and Powers) (Scotland) Bill.

That concludes the public part of the meeting.

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