RURAL AFFAIRS AND ENVIRONMENT COMMITTEE

Tuesday 1 September 2009

Session 3

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RURAL AFFAIRS AND ENVIRONMENT COMMITTEE 19th Meeting 2009, Session 3

CONVENER

*Maureen Watt (North East Scotland) (SNP)

DEPUTY CONVENER

*John Scott (Ayr) (Con)

COMMITTEE MEMBERS

Karen Gillon (Clydesdale) (Lab)

*Liam McArthur (Orkney) (LD)

*Alasdair Morgan (South of Scotland) (SNP)

*Elaine Murray (Dumfries) (Lab)

*Peter Peacock (Highlands and Islands) (Lab)

*Bill Wilson (West of Scotland) (SNP)

COMMITTEE SUBSTITUTES

Rhoda Grant (Highlands and Islands) (Lab) Jamie Hepburn (Central Scotland) (SNP) Jim Hume (South of Scotland) (LD) Nanette Milne (North East Scotland) (Con)

*attended

THE FOLLOWING GAVE EVIDENCE:

Libby Anderson (Advocates for Animals)
Professor lan Boyd (University of St Andrews Sea Mammal Research Unit)
Brian Davidson (Association of Salmon Fishery Boards)
Professor Colin Galbraith (Scottish Natural Heritage)
Rob Hastings (Crown Estate)
Captain Nigel Mills (Orkney Islands Council)
Walter Speirs (Association of Scottish Shellfish Growers)
Professor Phil Thomas (Scottish Salmon Producers Organisation)

CLERK TO THE COMMITTEE

Peter McGrath

SENIOR ASSISTANT CLERK

Roz Wheeler

ASSISTANT CLERK

Lori Gray

LOC ATION

Committee Room 5

Scottish Parliament

Rural Affairs and Environment Committee

Tuesday 1 September 2009

[THE CONVENER opened the meeting at 14:00]

Decision on Taking Business in Private

The Convener (Maureen Watt): Good afternoon, everybody, and welcome to the Rural Affairs and Environment Committee's first meeting after the summer recess. This is the committee's 19th meeting this year. Its main purpose is to continue to take evidence on the Marine (Scotland) Bill. I remind everybody to turn off their mobile phones and pagers, as they impact on the broadcasting system. We have received apologies from Karen Gillon.

Agenda item 1 is to consider whether to take in private item 4, under which the committee will consider candidates for appointment as budget adviser. Do members agree to take that item in private?

Members indicated agreement.

Subordinate Legislation

Smoke Control Areas (Exempt Fireplaces) (Scotland) Order 2009 (SSI 2009/214)

Seed (Scotland) (Amendments for Conservation Varieties) Regulations 2009 (SSI 2009/223)

Marketing of Horticultural Produce (Scotland) Regulations 2009 (SSI 2009/225)

Seed Potatoes (Scotland) Amendment Regulations 2009 (SSI 2009/226)

Animals and Animal Products (Import and Export) (Scotland) Amendment Regulations 2009 (SSI 2009/227)

Products of Animal Origin (Third Country Imports) (Scotland) Amendment Regulations 2009 (SSI 2009/228)

Control of Salmonella in Poultry (Breeding, Laying and Broiler Flocks) (Scotland) Order 2009 (SSI 2009/229)

Zoonoses and Animal By-Products (Fees) (Scotland) Regulations 2009 (SSI 2009/230)

Horse Identification (Scotland) Regulations 2009 (SSI 2009/231)

Brucellosis (Scotland) Order 2009 (SSI 2009/232)

Rural Development Contracts (Rural Priorities) Scotland) Amendment (No 2) Regulations 2009 (SSI 2009/233)

14:01

The Convener: Item 2 is subordinate legislation. There are 10 negative Scottish statutory instruments to consider, which is quite a handful. SSI 2009/233 appears on the agenda, but we will consider it next week, as members received the wrong version of the Executive note with their papers for the meeting.

The Subordinate Legislation Committee has commented on four of the 10 instruments: SSI 2009/225, SSI 2009/226, SSI 2009/231 and SSI 2009/232. The relevant extract of that committee's report has been circulated to members in paper 12. No member has raised points on any of the instruments in advance and no motion to annul

has been lodged. Does any member have comments to make on any of the instruments?

Peter Peacock (Highlands and Islands) (Lab): If members have no comments to make or questions to ask about the instruments, I would be happy to deal with them en bloc rather than go through them individually.

The Convener: Do members agree to that approach?

Members indicated agreement.

The Convener: With the exception of SSI 2009/233, which will be considered next week, do members agree to make no recommendations in relation to the instruments?

Members indicated agreement.

Marine (Scotland) Bill: Stage 1

14:02

The Convener: Item 3 is our fourth evidence-taking session on the Marine (Scotland) Bill. The purpose of this session is to hear from a range of stakeholders. The first panel of witnesses will focus on the part of the bill that deals with seal conservation; the second will cover the parts of the bill that deal with marine planning, protection and licensing.

I welcome the first panel. Libby Anderson is policy director for Advocates for Animals; Professor Ian Boyd is director of the sea mammal research unit at the University of St Andrews; Brian Davidson is from the Association of Salmon Fishery Boards; Professor Colin Galbraith is director of policy and advice for Scottish Natural Heritage; and Professor Phil Thomas is chairman of the Scottish Salmon Producers Organisation.

We move directly to questions.

Elaine Murray (Dumfries) (Lab): I welcome the panel. We are all back after the summer recess. Perhaps it is just as well that the summer is over in light of the sort of summer that it has been.

Two species of seal are native to Scottish waters: the grey seal and the common seal. The International Council for the Exploration of the Sea has suggested that the grey seal population is increasing, but there seems to be evidence that the common seal population is decreasing. Can members of the panel give us more information about that? Perhaps they could give us possible reasons why there are such changes in the populations of both species of seal. Can panel members describe the predation habits of each species? I understand that grey seals can travel much further and that they are possibly more implicated in the predation of cod and salmon than common seals are.

Professor Ian Boyd (University of St Andrews Sea Mammal Research Unit): That sounds like a question for me.

I thank the committee for the invitation to speak to it. I will divide my answer and deal with grey seals and common seals separately. The grey seal population has, for a large mammal population, been increasing quite rapidly for the past few decades, but there is strong evidence of a decline in the rate of increase and of the population numbers approaching stabilisation on the west coast and Orkney.

In the North Sea, the numbers continue to increase. Our measures are based on the number of pups produced by the population. There is always a time lag between the change in the

number of pups produced and the change in the population trajectory. The number of pups being produced in the Hebrides has been stable for the past 10 to 15 years, so we would expect the population there to be stable, rather than increase. In Orkney, the number of pups being produced is approaching stability; we would expect the population to continue to increase to some extent for a while and then to stabilise. In the North Sea, the population is still increasing.

The reasons for the change in the grey seal population are hard to fathom. There are a range of reasons for it, some of which stretch back into the long-term history of the management of the species. It was a popular species to hunt in the northern isles and Hebrides before the second world war. The introduction of legislation has probably increased protection of the animals. Depopulation of the outlying islands has reduced the amount of human predation of the seals, which is probably a major factor. There have been changes in the food supply for the animals, possibly as a result of the effects of fishing on the ecosystem. The fact that the animals have probably been able to exploit the effects of fishing, rather than be affected by it negatively, is another possible reason for the changes in the population. Around the world we see seal populations increasing in many different areas. It is quite hard to put your finger on exactly why that has happened.

I turn to harbour, or common, seals. We use both names, so excuse me if I switch between them. We know less about common seals, because they are much more difficult to survey. We have less precise information about their population numbers. Despite their name, there are fewer of them than grey seals. We think that there are 140,000-odd grey seals in the United Kingdom, 90 per cent of which are in Scottish waters. We think that there are about 40,000 to 50,000 common seals, about 30,000 of which are in Scottish waters, so common seals are much less abundant than grey seals. They are also smaller than grey seals, and they are more coastal. They are the seals that you will often see around the coast, whereas grey seals are offshore.

The surveys of common seals that we carried out until the early 2000s suggested that the common seal population was roughly stable. However, about three years ago, our survey suggested that there had been an extremely rapid decline—considering how slowly the animals are able to reproduce—in Orkney and Shetland in particular but also to some extent down some of the North Sea coast. The decline that was observed was equivalent to all the pups that were born in the population every year not surviving.

It is too early to say what the cause of that decline has been. We will probably never know. There are a variety of possible reasons. Some of the more favoured reasons are that a certain amount of killer whale predation goes on in the northern isles. We cannot completely ignore the possibility that there is competition with grey seals. There is also human predation, which is inevitable because there are conflicts between seals and in the various human activities marine environment. It is unlikely that any one of those factors is the cause of the decline; there have probably been multiple effects. We also think that some form of natural pollution through toxins might have affected the population. That is still subject to research, but there is an indication that some sort of biotoxic effect might have reduced the viability of the population.

That is a long summary, which I hope covers most of the question. I did not say much about what the animals are predating. Do you want me to say something about that?

Elaine Murray: Yes, please.

Professor Boyd: Grey seals and common seals have similar diets, but you are right to consider that they tend to forage in slightly different areas. Common seals tend to be more inshore in their distribution and grey seals tend to be further offshore. Grey seals also move through much larger areas. We find animals moving from the North Sea to the west coast and back again, for example, whereas it is unlikely that that would happen with common seals. Common seals that feed out of the Firth of Tay will probably feed out on the Wee Bankie area. They will feed up to about 60km to 100km offshore. Grey seals will feed in those areas as well, but they will also move further away.

Both grey and common seals rely on sand eels as one of their main dietary items. However, they also eat a lot of other species. Basically, they eat what is most abundant out there. There is no doubt that they eat commercial fish species. There is a question mark over whether they have a significant effect on the populations of such species, but the predation rate is factored into the calculation of theestimate of fish available for fishermen.

Seals eat cod, haddock and other species, but I would say in mitigation that they are by no means the only predators out there that eat those commercial species. In fact, cetaceans in the North Sea eat more commercial fish than seals do.

Peter Peacock: Can I pursue seals' eating habits a bit further? Seals are intelligent animals that learn behaviours. If we consider fish farming, river mouths and so on, I understand that some seals will take salmon from nets and some from

rivers but that not all seals behave in the same way. First, is that correct? Secondly, is there any difference in behaviour between greys and commons with regard to that aspect of fishing management?

Professor Boyd: That is broadly correct. We believe that individual seals can be highly selective in their diet. That is based on a range of different types of evidence. There are probably seals that learn specific behaviours. That has resulted in our advising that management measures ought to be targeted closely at the centre of the problem rather than at the population as a whole, because in that way we tend to pick up the animals that have learned the behaviours with which we do not get on. In managing the population as a whole, we probably manage a lot of what we could call innocent animals at the same time. That is an important principle and a relevant point to raise.

Peter Peacock: Is there any difference between commons and greys in that regard?

Professor Boyd: I am sorry—I did not pick up that second part of your question. We cannot be certain about that; I think that it is too early to say. Greys and commons both appear in rivers, for example. Because commons are more inshore animals, they probably occur more in rivers than grey seals do, but it depends on the part of Scotland that we consider. Both greys and commons affect fish farms, but we do not know the ratio. Grey seals are much bigger and more powerful animals and they are therefore more likely to cause serious damage at fish farms than common seals are, which are small and slight animals by comparison. However, both cause damage—that is for sure.

Professor Phil Thomas (Scottish Salmon Producers Organisation): To pick up lan Boyd's final point, both types of seals are attracted to fish farms, but what distinguishes them is the size of the animals. By and large, common seals cannot break nets in a significant way, as they do not have the power to break through things. A large grey seal is a big animal, so it has the power to cause significant destruction to a net if it wants to. If there is a hole or a clever way of getting into a cage, common seals can do that but, by and large, they are much easier to deter with screen netting than greys are.

14:15

Peter Peacock: The written evidence from Advocates for Animals indicates that no scientific or conservation argument is provided in the bill or its accompanying documents for the need to manage seal populations. I understand that point, taking the populations as a whole. However, do

you accept that, because of seals' learned behaviours, there may sometimes be a need to manage local seal populations?

Libby Anderson (Advocates for Animals): Yes. Clearly, there will be local conflicts. Anecdotally, I know that people will identify problems locally. I have just visited some fish farms in Shetland, where I heard about a variety of scenarios in which local problems are dealt with in a variety of ways. However, I am not sure that managing a population is appropriate or that it should be the first answer, particularly when we are considering conservation and animal welfare.

Peter Peacock: Are we talking about management being killing?

Libby Anderson: Management control implies lethal control. The fish farm industry has invested a great deal of time and resources in the development of anti-predator nets. I have seen farms where the net was a 100 per cent deterrent for any seal problems that existed. Of course, the interactions between fish farms and seals may involve seals being present but not necessarily doing any damage, as fish farmers have told me. We must therefore consider the individual scenario and whether management—or lethal control—is the appropriate solution. Of course, Advocates for Animals would say that that should be way down the list.

Peter Peacock: Just to be clear, I am picking up from your evidence that your use of the term "management" embraces both lethal management and management of the sort that Professor Thomas described, such as using predator nets.

Libby Anderson: I am really talking about lethal management. As I said, the bill does not make any case for that specific claim.

Peter Peacock: You would prefer that option not to exist, which I understand. However, do you accept that lethal management, albeit that it might be at the bottom of the list of options, may sometimes be necessary in certain localised circumstances?

Libby Anderson: I accept that it is likely to remain one of the solutions that the bill will permit. In that context, my next argument would be that we should mitigate that solution as much as possible for animal welfare.

Peter Peacock: That is established—thank you.

Bill Wilson (West of Scotland) (SNP): I want to follow up a couple of points with Professor Boyd. If I heard you correctly, you said that fish predation by seals is taken into account in managing commercial fish stocks. Is that correct?

Professor Boyd: Yes.

Bill Wilson: To put matters in context, can you

give me an idea of what percentage of fish in commercial fishing is taken by seals?

Professor Boyd: Very roughly, the total amount of fish that seals require in order to sustain themselves is similar in volume to the total Scottish fish catch—it is in the same sort of order of magnitude. However, the vast majority of the fish that seals take are probably not fish that would be fished by commercial fishermen. For example, gurnards are a significant part of the seal diet in the North Sea, but we do not fish for gurnards. Obviously, seals take a large amount of sand eels, which we do fish for. However, we have reduced what we take significantly in the recent past because of concerns about the effects of sand eel fisheries on predators. Those are mainly sea birds, but I guess seals are included, although we have not yet seen any effect on seal populations of reducing sand eel numbers.

Overall, seals take significant numbers of fish that are of commercial value, but I cannot give you the exact numbers right now. In fact, we do not really have the exact numbers because there are large areas of uncertainty around the numbers. When cod stocks were at their lowest, the amount of potential cod that were taken by seals could have contributed to keeping the cod reduced in numbers. There is a concept called the predator pit or trap that fish species can get into. If a fishery fishes a species down, and there is another predator present that snacks on that species at a relatively low amount, that can be enough to keep the fish species from recovering. It is unlikely that that is the case with seals and cod, but it is always a possibility.

Bill Wilson: You noted that seals are opportunistic predators. If cod numbers crash, the seals will presumably shift predominantly to feeding on other species. Is that correct?

Profe ssor Boyd: We would expect that to be the case. However, to return to the earlier question, we know—or think—that seals learn to predate particular species. It is quite possible that as a species increases in abundance, animals will shift towards it, but if it declines, they will continue to feed on it as they still have the search image for that particular species. It is the target species for those animals, because they have learned to feed on it.

Bill Wilson: I have heard it argued that the other fish species that seals feed on may feed on the young of the commercial species, and therefore when seals feed on those other fish species they may reduce predation pressure on the young of the commercial species. Do you have a view on that?

Professor Boyd: Fish do feed on the young of their own species; there is no doubt that they are

cannibalistic. There is a very interesting relationship between the dynamics of the cod population and the numbers of large adults in the population. The cod population can self-regulate by eating juvenile cod.

Bill Wilson: So there is a compensatory mortality.

Professor Boyd: Yes, but it leads to quite complex and difficult-to-predict dynamics in the population.

Bill Wilson: What about the non-commercial species that the seals might be eating? Do many of them predate the young of cod?

Professor Boyd: Yes, they can do. It is very difficult to say whether the numbers of cod or commercial species would increase if we took seals out of the system. I would not put a bet on it, because the effect of seals on the ecosystem may be such that, as you correctly point out, they release the pressure on young cod that may then grow to maturity to become reproductively active in the cod population.

Bill Wilson: I have one question that I suspect you may not be able to answer. We are talking about learned behaviours in relation to nets. Can you give me an idea of the percentage of seals in the population that have such learned behaviours, or is that an impossible question?

Professor Boyd: All of them will have learned behaviours.

Bill Wilson: Yes—I meant specifically in relation to the nets.

Profe ssor Boyd: In relation to salmon fisheries and farming, I can only guess. I would say—and this is not based on any data at all—that the proportion of the common seal and grey seal populations that predate at salmon farms or in salmon rivers will probably be a few per cent, and not much more than that.

Bill Wilson: So if you were shooting in an area, you would miss unless you targeted the seals very specifically—we are talking about one or two seals in 100

Professor Boyd: Yes, that is our view at the moment.

Profe ssor Thomas: Ian Boyd has covered most of the points on feeding habits very well. However, the distinction in relation to farmed fish is that it is not the amount of fish that the seal eats; seals have a particular liking for salmon livers, and they will go through a net of salmon and simply take one bite from each fish. You end up with a cage of fish in which large numbers have one bite taken from them; it is a fox-in-the-hen-coop type of feeding behaviour. Those are the seals that cause the most damage in fish farms.

Bill Wilson: Very few seals do it, but if they get in, it is fairly catastrophic.

Profe ssor Thomas: If they get in, it is catastrophic. They can kill literally hundreds of fish. They will kill fish in significant numbers even if they can get just close enough to the net to bite through it—they will suck out the salmon's liver. You end up with these fish that have one big bite out of them.

John Scott (Ayr) (Con): Are they clever enough and is their learned behaviour such that one seal will frighten the fish at one side of the net while another comes in from the other side? Do they hunt in packs, like wolves?

Professor Thomas: They can be clever enough although, as far as I can tell, there is very little science on that. What strikes me when I speak to salmon farmers is that a farm can have no problem with seals for ages—up to two or three years—and then, all of a sudden, a seal or two will appear and will continue to attack until they have to be shot. Some seals in those circumstances will break nets. As Libby Anderson said, the industry has invested literally millions in a series of deterrent systems, but it has not yet come up with a system that will keep every seal out, 100 per cent of the time. That is the difficulty.

Professor Colin Galbraith (Scottish Natural Heritage): Thank you for the invitation to talk to the committee. To follow on from Professor Thomas's point, there is an information gap on the behaviour of seals at salmon farms. It is important to get proper data on the age, sex, species and individuals involved, and on exactly how they behave at salmon farms. I agree with Professor Boyd that it is probably a small percentage that are coming in and, in some cases, causing major damage, but that has to be considered in more detail.

Liam McArthur (Orkney) (LD): In relation to the evidence gap to which Mr Galbraith referred, the policy memorandum states that the bill's proposals on seal management are very much based on the Moray Firth seal management plan. The evidence from the Association of Salmon Fishery Boards suggests that the Moray Firth management plan

"is viewed as a successful template for considering how seal and salmon interactions can be analysed so that, amongst other things, impacts on salmon can be minimised whilst at the same time the conservation status of seals ... can be considered."

In contrast, the Seal Protection Action Group has called into question the success of the plan and suggests, in relation to the suggestion that seal shootings are down by 60 per cent, that there is

"no information provided to support that statement or indicate that it will reverse the decline in common seals in the area."

Will Mr Davidson comment on the success or otherwise of the plan, and the basis for determining its success?

Brian Davidson (Association of Salmon Fishery Boards): Thank you for the opportunity to comment. We felt that the plan was a useful starting point for bringing together a wide range of agencies that have an interest in seals, from both a fisheries and a conservation viewpoint. It certainly enabled all the parties to build up their knowledge and expertise on the impacts that exist between the sectors.

As Professor Boyd said, some data have been collected from the project that would be useful to pilot elsewhere. For example, we have learned about the behaviour of very small numbers of specialist seals that come into rivers and predate salmon. As Professor Boyd indicated, although the numbers of such seals are very small, they have developed the expertise to remove valuable salmon, which can have quite a devastating effect on the economy and on fisheries.

We have started to piece together some useful parts of the jigsaw on the interplay between seals and salmon. The key strength of the model is that it gathers together data and asks people who want to be involved in control measures to report those data in a transparent and clear way to the relevant agencies so that everyone can learn from the process and it can be transferred to other areas with some degree of success.

14:30

Libby Anderson: It is important to consider how the Moray Firth management plan may be an analogy for the proposed licences being given on a group basis. We have some concerns about that. The Moray Firth plan was an open-minded and practical solution to a number of competing priorities. We would especially welcome elements such as the reporting requirement that Brian Davidson has just mentioned. However, as a pilot, it is not necessarily applicable to the bill. For one thing, there were only three fish farms in the area at the time, which were not operational, so fish farms are not in the equation as far as the Moray Firth is concerned. The Moray Firth farm management plan relies particularly on the netsman's defence under the Conservation of Seals Act 1970 to cover the requirements of the netsman. Although the fisheries boards in the area were very much covered by the legislation and, as far as I can see, it has been successful, there are major elements in the plan that do not apply and were absent from what the bill will cover, if that makes sense.

Much more consideration needs to be given to allocating licences on a group basis. In our

evidence, we have proposed that it is a good idea to do an assessment of the permitted biological removal in a given area, in order to consider what the populations can tolerate. However, we would not want active licences to be given out for killing an individual seal, on the basis that individual groups and commercial interests would be administering it themselves.

Liam McArthur: You have both touched on the issue of the availability of data and the need for a clearer understanding of what is happening. A concern has been expressed that figures are being bandied about that are polar opposites, which means that it is hard to determine the number of seals that are being shot.

Notwithstanding the caveats that you have expressed in relation to the situation in the Moray Firth, are you confident that the way in which the data are being gathered in that area is robust and would be applicable to other areas? Regardless of whether the reduction in seal shooting has been of the order of 60 per cent or something else, is part of achieving a reduction about making those partners who have been involved in the management plan more aware of non-lethal alternatives? Is it more to do with spreading good practice than anything else?

Professor Boyd: The Moray Firth's seal population has been roughly stable since the plan was introduced, whereas most of the seal populations in the surrounding areas have declined. The evidence suggests, therefore, that the act of management in that region has been successful. Whether the population would have declined if there had been no management is an open question, of course, but the Moray Firth is, at least, bucking the trend.

One of the valuable things that have come out of the Moray Firth management plan is that we have been able to get all the interested parties to sit round a table, understand each other's point of view and come up with a consolidated and practical solution. However, we should not suggest that exactly the same solution will be arrived at in other regions because there will be other priorities and pressures in other regions, not least of which might be the fact that some areas might have rather higher populations of seals than the Moray Firth did.

Profe ssor Thomas: The only figures that are in the public domain for seals that are shot, as far as I am aware, are those from the salmon industry—we put those in the public domain a little over a year ago.

Libby Anderson and I agree on a lot of things, but there is one thing that we disagree on. Libby Anderson thinks that you cannot believe any figure that comes from industry, although you can believe any figure that comes from a non-governmental organisation. I have much more confidence in the figures than she does.

I should explain that I am also a member of the board of SNH. Colin Galbraith might be the right person to say what I am about to say, but I will say it anyway. Because of factors that Ian Boyd referred to earlier, such as the competition between common seals and grey seals, the notion that we should look at population areas and have different rules that apply in different areas seems logical to me, as we might, for example, reach a situation in which, in order to maintain the population of common seals, we might have to manage the grey seals. That is a wider issue, but it comes down to a horses-for-courses, area-by-area approach.

The Convener: I was going to ask about that. When we have been out and about taking evidence, we have found that it is the rogue seals that damage the nets and take fish from fish farms that are likely to be shot.

In the rivers, can you distinguish the rogue seals that are scooping up loads of fish and are, therefore, candidates for being shot, or does there just have to be random shooting? If it is possible to distinguish the rogue seals from the other seals—which would mean that the industry would be shooting only the seals that were taking the fish in huge numbers—why do you want there to be a percentage?

Libby Anderson: It is difficult to define roguishness in a seal, in as much as it is a predator.

The Convener: Well, it is a rogue seal if it is in a fish farm.

Libby Anderson: In its natural environment, or in a river, such a predator will catch as much as it needs to consume. Areas of conflict arise when there is a concentration of fish, and the seal's behaviour becomes aberrant. That is when we call a seal a rogue, because of the negative interactions that we see.

I am not sure that I understood your point about wanting there to be a percentage.

The Convener: You were talking about having a percentage of seals that could be shot.

Libby Anderson: I was referring to the basis on which the Moray Firth seal management plan is organised, in as much as PBR was the basis on which the upper limit of seals that might be shot was calculated.

I was suggesting that a great deal more detail must be elicited from the Government on its licensing proposals. However, if licenses are to be given on a group basis, it would be possible for the sea mammal research unit to make calculations and say that, in a given area, there must be no more than a certain amount of biological removal. That would set the context.

One of the concerns in the industry about the licensing proposals is that it might take too long to get a licence when a farm has a problem with an individual or rogue seal. However, we on the animal welfare side are saying that we do not want licences to be dished out too readily, because inquiries must be made into the absolute need for killing any individual seal. We are suggesting that the percentage of seals that can be shot—the permitted biological removal—and other factors can be considered in advance, but that no licence for the killing of an individual seal should be issued until the need has been shown in that case. Is that clearer?

The Convener: Somewhat. Perhaps some of my colleagues will take up the point later.

Professor Galbraith: The Moray Firth trial has been a major step forward because, as Ian Boyd said, it brought everyone round a table. It is about seal management, but it is also about taking a forward look at a research agenda. You have highlighted two information gaps: the individual behaviour in river systems and the individual behaviour around salmon farms.

The sort of round-table discussions that interested parties had in the Moray Firth trial could be replicated elsewhere, with a view to working on what scientists would call meta-populations around the coast, which would build in a degree of local flexibility with regard to how the seal populations are managed. That could take into account the issue of animal welfare as well as the needs of the industry.

We can see a reasonably constructive way forward, based on the Moray Firth type of model.

Peter Peacock: I want to pursue that point. In its evidence, SNH has talked about putting management planning potentially on a statutory footing rather than leaving such matters to voluntary initiative. How would that operate? Would there need to be dozens of such management plans? Who would trigger the process? Would licensing subsequently depend potentially on the existence of the management plan?

Equally, I got the impression from Professor Boyd and Libby Anderson that they take the contrary view that the management plan process might not be necessary. It would be helpful if they could clarify whether they think that management plans are a good thing per se. Will the witnesses explain a bit more about their thinking on that?

Profe ssor Galbraith: The reality is that we are talking about a management plan. It might appear under various guises, but we are talking about managing a population. That management could be in the sense of monitoring the seals and recording how they are doing, but it could also go all the way through to lethal control. I think that management of the seal populations around Scotland is an inevitable consequence and has been such for the past 20 or 30 years.

If we start from that point, we really need to look at the buy-in from the people who are interested in or affected by seals. The more that we can develop that, the better. If such buy-in works on a voluntary basis, so be it. However, the need for credible, legitimate information and data from all sources on the population numbers and on the numbers killed is so important that there is merit in at least considering a statutory basis for a management plan.

Ideally, I would hope to minimise the proliferation of such plans, because bureaucracy can be a real slow-down to delivery. However, we need to balance the need to get plans in place that can actively manage the populations—with the SMRU doing some of the scientific work behind that—and the need to allow local delivery. Such detail needs to be dealt with beyond the legislation.

Peter Peacock: Let me be clear about that. Are you suggesting that there should be a statutory need for a plan—which would imply that there should be a plan everywhere—or that any plan that is created should be given statutory force, notwithstanding that such a plan might not be required?

Professor Galbraith: Probably the latter. A requirement for an overarching plan would probably be a bit of overkill, although that is up for debate.

Peter Peacock: So where a plan exists, it should be given statutory force so as to help the management process.

Professor Galbraith: Yes. I think that that would also fit in with other, wider developments in the bill.

Libby Anderson: Obviously, a plan for management in which "management" means lethal control is not something that we would agree with. If the plan was a plan for managing interactions and involved full knowledge of the effect of people on seals and of seals on people's economic interests as well as matters of population, conservation and addressing animal welfare issues, we would have no problem with it.

Alasdair Morgan (South of Scotland) (SNP): I had intended to ask this question later, but it is

relevant now. It strikes me that the submissions from Advocates for Animals and the Association of Salmon Fishery Boards make similar suggestions. The Advocates for Animals submission suggests that there should be

"a permitted maximum number of seals agreed".

The Association of Salmon Fishery Boards suggests that there should be

"an agreed pre-set allocation for each area".

One of the big difficulties is how to move from having a permitted allocation to the shooting of a particular seal.

In particular—clearly, I am not an expert on this—I wondered about rogue seals. First, is it always possible to know that we are dealing with a specific seal, which is what Advocates for Animals wants to issue a licence for? Secondly, even if that is possible, given that shooting a seal that is not covered by a licence will be a criminal offence, how would the licence specify that seal in such a way that a court could determine that a person had killed that seal rather than some other seal?

Libby Anderson: You have put your finger on one of the most difficult problems. People who work on fish farms and in other parts of the marine environment have great difficulty knowing even what species of seal they are complaining about. I have heard fish farmers say, "It is the common seals, which I understand are declining so I don't know why we're having so many problems with them", when it is clear that the animals that have been around their cages were grey seals. There is a serious problem with identifying the type of seal, never mind the individual seal.

In the olden days, the fish farms used to have antifouling paint on the nets, so people could see that the seals had red paint on them after being up at the nets. I suppose that there might be some simple method that would be similar to that, but you are right to make the point.

lan Boyd referred to innocent seals. There can be no justification for going to a colony and shooting a number of seals. One fish farmer said to me, "You could shoot 20 seals and not get the one that was bothering you." We cannot, ethically, legislate for that under the bill.

14:45

Professor Thomas: I must express a view that is contrary, in a sense, to what Libby Anderson has said. Nobody goes to seal colonies and shoots seals. That is not the way it happens. No fish farmer ever wants to shoot a seal—that is not the motivation. There is no difficulty in identifying which seal is attacking the nets, as the fish farmer can usually see the seal there and then. The problem is that any notion—

Alasdair Morgan: I am sorry to interrupt, but when you come back the next day, having got your licence, how do you know that it is still the same seal? How different are they from one another?

Professor Thomas: That is totally impractical. The notion that someone would have to apply for one licence for a particular seal is an utterly unworkable proposition. Think about the analogy of the fox in the hen-coop. A seal is attacking salmon, and we have to pick up the phone to Edinburgh to apply for a licence. The licence might come through in due course, but by that time the problem would be over because the fish would all be dead. We must take on board the way in which the licensing system would have to work. Some block or upper limit would be required—that is an idea in the Moray Firth plan-and that would allow the population of seals to be maintained. When a seal is attacking a net, people must be able to take action there and then to do something about it.

Bill Wilson: Let us say that there is an upper limit. Let us suppose that the fish farmers may shoot 10 seals, and that they have done so. If the pens are raided again, it is a case of, "Bad luck, you've reached the upper limit." Is that correct?

Professor Thomas: The evidence on that is not there; I am speaking on the basis of the evidence that I have regarding the number of seals that are shot. If we do the calculations on a population basis, the number of seals that are shot by people involved in salmon farming—I cannot comment on river boats—is well below the population limits that would be set across Scotland.

John Scott: So you are not shooting up to your quota.

Professor Thomas: That is exactly right. I was keen to stress the need for some sort of area analysis because the only calculations that I have done up to now are based on a total seal population in those areas where there are fish farms. The problem that you have identified might potentially occur in some narrow, specific area that I have not yet identified. We cannot rule that out as a possibility, but I consider it quite unlikely.

Bill Wilson: If a seal population could take a loss of 10 per cent of adults, the quota could be set at 10 per cent of the seal numbers in the area concerned—is that what you are saying?

Professor Thomas: No. The driving force is to shoot a seal only if there is no alternative.

Bill Wilson: I understand that, but I am trying to work out how to calculate any upper limit.

Professor Thomas: Ian Boyd would be a better person to speak about it, as he has been involved with the Moray Firth plan. Basically, we know the size of the population and we know the

reproductive rate. We therefore know the level at which the population is being maintained. We scale down from that to set a limit that will not influence the population.

Bill Wilson: That is what I was talking about. You set the limit according to what losses the seal population can bear.

Professor Thomas: Yes—essentially, that is the principle in the Moray Firth plan, as I understand it.

The Convener: Is that not looking at the situation in the wrong way? You want to ensure that enough salmon are getting up and down the rivers, and you want to kill only rogue seals, if possible. You could perhaps set a base year and achieve some sort of stabilisation, and then take it from there each year. If you set an upper limit, or quota, but you have not reached it by the end of the year, do you stop or do you go and shoot some more?

Professor Thomas: We would never shoot in order to approach the limit; we would only shoot what we needed to shoot.

Having a limit would get over the problem of any feeling of a threat to the population. At least, if the number shot was a threat to the population, action would have to be taken to address that. My feeling is that having a limit would not be a problem—that is not the issue. Pretty well every salmon company that I know of studies the number of seals that it shoots each year and uses that information to keep improving anti-predator devices. The companies want the number of seals that they shoot in a year to reduce the following year, because that means that they have better predator control. All the drivers are for the number to come down.

Professor Boyd: For clarification, I will again use the Moray Firth management plan as a template. The plan defined seal management zones and, because we were trying to protect salmon within the estuaries of rivers, the zones were within those estuaries—they were the only places that seals could be managed. Any seal that entered a zone was defined as what we might call a rogue seal—I would not want to use that term, but it was a seal that could potentially be shot. By definition, just by being in the area, the animal might be feeding on the salmon that we wanted to protect.

There is a recognised methodology for setting the total numbers, which Phil Thomas summarised very well. It is relatively easy to set the numbers, but the issue is more difficult when the numbers that are set are well below the kind of numbers that those involved would like to shoot. We have had that issue in the Moray Firth. That set in motion a process whereby the district salmon

fishery boards had to decide between themselves where the priorities lay. They prioritised areas where animals could be shot and how many could be shot. As a result, there was downward pressure on the number of animals that were being shot. We have reduced by an order of magnitude the number of animals that have been shot in the Moray Firth in the past few years, but we have still achieved the objectives for the salmon population and the salmon fishery. We have had a success in that sense.

Bill Wilson: We are almost talking about two different aspects of control. One is about balancing the seal population within a firth that is predating on wild fish, and the other is about managing the control of seals that predate specifically on fish in nets. Those are two slightly different issues.

Professor Boyd: I do not think that they are really so different. In the Moray Firth, the management zones were defined in the same way as we might define a management zone around a fish farm or something similar. An animal that is seen within a defined range of a fish farm is potentially an animal that is predating on the fish in the farm—to be frank, it probably is, as long as that range is not too large. In discussions, we have talked about the range of about one rifle shot from the centre of the fish farm as a reasonable range to think of as a zone around the farm.

Bill Wilson: What range is that? I have never fired a rifle.

Professor Boyd: It is a range of about 50m or so

John Scott: Before I ask my main question, I will raise a point that has just occurred to me. Do grey seals predate on the smaller common seals?

Professor Boyd: It has never been observed, and it is highly unlikely.

John Scott: Right.

I want to ask about licensing. Section 97 talks about seals being taken under licence. As it stands, is the bill sufficient to comply with the European Union habitats directive, or does it need amendment?

Professor Galbraith: The EU habitats directive requires us to consider the favourable conservation status of species, and seals are included in that. We therefore must periodically put together an assessment for the EU of whether the species is in a favourable condition. In doing so, we examine the numbers, the range and the breeding success over a period of years.

We think that the bill and the provisions on seals that it contains are a major step forward that will enable better reporting to the EU. If we take a holistic view, which involves looking at whole populations and considering all the animals that are killed by people around the coastline, and we report that back through Government, that will allow us to put together a more detailed and more holistic report for the EU. That is a major step forward. It is a helpful addition to the EU requirement on reporting.

John Scott: So the bill is likely to be EU compliant.

Does anyone else have a view on that?

Professor Galbraith: I do not see any reason why the bill would not be EU compliant. The data and evidence from Scotland and the UK that we have on how to manage a population are undoubtedly EU leading.

John Scott: In its written evidence, the seal protection action group said:

"the Bill should prescribe that best available non-lethal deterrent measures must be used, and have demonstrably failed, before consideration is given to granting a seal licence".

What are your views on that?

Professor Thomas: I can give you an overall view, which is based on a survey that we have done of SSPO members. What seemed to come out of that is that pretty well all companies use pretty well all methods. They all use a battery of methods, from acoustic deterrent devices to screening nets. Almost every company uses tension nets as the first step in the system, if I can put it that way. The difficulty is that, for reasons that no one is entirely sure of, some methods work much better in some places than in others. The notion that we should prescribe a single method is impractical because it would not always work as well in different areas.

As far as attacks are concerned, there is no doubt that many of the deterrent measures will prevent seals from breaking through, but as I said, the reality is that no combination of existing measures will provide a 100 per cent guarantee that there will be no seal attacks in any set of circumstances.

There are some special features. For example, acoustic deterrent devices are extremely effective in some areas, but in other areas it is a condition of the fish farm's licence that they cannot be used because of concerns about cetaceans in the same area. There are different ways of using deterrent methods. Some farms find that switching a deterrent on and off is much more effective than leaving it on all the time. Frankly, we do not have a very good understanding of why that is the case, but there are differences from place to place.

John Scott: That is like what happens with a bird scarer if it is left on all the time in a field of wheat.

Professor Thomas: Absolutely.

John Scott: Different farms must use different combinations of non-lethal deterrent measures, so to suggest that all non-lethal deterrent measures must have "demonstrably failed" implies that all fish farms should be protected similarly, which is probably impractical.

Professor Thomas: Yes, it is impractical. It simply would not work.

One complication is that different sites require different net types and different net shapes, so one type of blanking screen might not be a particularly good one to use in a particular net combination. It might be necessary to change the nature of the blanking screen to fit the cage type. There are technological elements that need to be considered. It is necessary to design the best deterrent system that one can in the location in question.

Libby Anderson: There is not really a general picture of the extent to which all the different antipredator measures are used in the industry. The survey to which Phil Thomas referred is a very recent one. Seal welfare groups and conservation groups have also been trying to gather such information. In my limited experience, farms tend to use the solutions that are available and those that are convenient to use. They do not necessarily use the most expensive solution—the fully tensioned anti-predator net at the appropriate distance from the cage. To avoid further disagreement, we would have to say that there is a lack of knowledge about what is actually being used out there, and the industry and the Government need to explore that when they are considering the terms of licences.

15:00

John Scott: Could you agree that a code of best practice should or could be worked out between yourselves and the salmon organisations that might suggest the best deterrent methods? Would that be a practical suggestion?

Professor Thomas: Yes, and what is more, I can tell you that a code of best practice already exists.

Inevitably, I will disagree with Libby Anderson. We have that information because we have asked companies exactly what they are using, but the information changes. As new kit comes on the market, companies implement it. By and large, they tend to implement changes in fallowing cycles. They do not disturb the fish during a

growth period; they wait for a fallow period and then change during that stage.

There is enormous variation. For example, the cheapest acoustic deterrent devices are probably down at £10,000 or £12,000 and the most expensive ones are £70,000 or £80,000. A huge range of different devices is available, and there is no guarantee that the most expensive one will be the most effective. It is very much a case of going for site-specific measures that actually work.

Professor Boyd: If the Government is going to issue licences to salmon farms to shoot seals, it is reasonable that it should be assured that the farms are using whatever measures it is reasonable to use in that location. As Professor Thomas said, that might vary between locations, but the Government needs to satisfy itself that that is the case, so that a licence to shoot seals is a last resort.

John Scott: Are you suggesting that there should be something like an inspectorate inspecting sites to see that best practice has been followed?

Professor Boyd: I would not advocate a specific inspectorate, but I know that site inspections are carried out regularly by the Scottish Environment Protection Agency and probably by Marine Scotland, so it would be helpful if it was on the tick lists of what they are already inspecting.

Professor Thomas: Again, that is something that Marine Scotland inspectors do as part of their inspection of cages. It is already part of the process.

Bill Wilson: So that means that data are available that could confirm how many farms use the actual techniques.

Professor Thomas: No. When they visit the farm, the inspectors would assure themselves that the cage designs and the systems that are in use are appropriate for that particular area. They would not record whether a particular type of deterrent device is being used. Indeed, the issue would be about what I said earlier; the deterrent device being used would change as the technology gets better. A particular growing period would have a particular set-up, but for the next set of salmon that go into the cages, the deterrent devices might be cranked up and additional screens or nets might be used. The picture is a moving one in that sense.

Alasdair Morgan: I have a question on licence conditions. The bill is fairly broad in that it just talks about the area, the species of seal and the circumstances in which seals may be killed. Advocates for Animals suggest that licences should require

"marks manship and competency to be demonstrated by applicants"

and that they should

"prohibit shooting in water or from unstable platforms".

I presume that that refers to the seal being in the water. It is also suggested that the licence should

"require applicants to ensure that if a seal is shot, it is actually killed outright."

Could the witnesses comment on that? From what we have heard about predators at fish farms, it strikes me that the only way you know when it is attacking the nets is when it is in the water attacking the nets. So a prohibition on killing seals that are in the water would just mean that you could not kill seals. How practical are some of those suggested conditions?

Libby Anderson: Some of them are entirely practical and are imposed by regimes in other countries. For example, in Norway it is not legal to shoot a seal in water. We have discussed that issue recently with members Ωf other environmental NGOs and welfare NGOs. The reason that we suggested that condition is that there is known to be a high rate of wounding when a seal is shot in water. At a north Atlantic marine mammal hunting conference in 2006, it was reported that the rate of adult seals that were wounded when they were shot in water varied from 5 to 50 per cent. That is far too high to be acceptable. On the other hand, we accept that there is a serious ethical concern about shooting at seals on their haul-outs. We must consider the issue

If somebody is going to take a gun to kill a large marine mammal, they must take responsibility for killing it and for not wounding it. I am sure that nobody could disagree with that. If somebody shot and wounded a domesticated animal and left it to die over a prolonged period, the law would rightly be brought to bear on them and society would support that. The fact that we do not see the consequences of shooting a large marine mammal in water is not relevant to the welfare argument.

That is why we have raised the issue of shooting in water. To my mind, the only argument against a prohibition on shooting in water is that the alternative is to shoot the animal on land. In all types of hunting and recreational fisheries protection around the world, there are serious concerns about wounding rates and what is called "struck and lost", which has been documented as being up to 50 per cent in Canada. If the animals are shot on land, the number that are struck and lost may be from 0 to 21 per cent. We ignore the animal welfare implications at our peril.

Professor Boyd: I agree whole-heartedly with many of the things that Libby Anderson said and

the sentiments that she expressed. However, there is a practical problem, which Alasdair Morgan has correctly identified. If one wants to manage seals around salmon fisheries and salmon farms, there is no choice but to shoot the animals in water. Therefore, to eliminate that option completely would, in effect, be to eliminate it as a management measure.

However, it is possible to comply with the wishes of Advocates for Animals by being specific about the training that is required for the individuals who shoot seals in water, the quality of the firearm that is used and the range over which the animals are shot. From personal experience, I can say that it is possible to shoot the animals with 100 per cent accuracy if one does not shoot over 50m with a properly zeroed rifle. Struck and lost rates are a problem elsewhere because of a lack of training and people trying to shoot at too long a range. Those are the two main problems.

Brian Davidson: I emphasise that the salmon fishery boards and salmon fishing interests are concerned with confined river spaces. On some occasions the seals are entirely in fresh water—they are beyond the estuary—so it is not a case of shooting in open water. An animal will have been observed taking fish for a lengthy period. We are concerned not only with the commercial damage of removing salmon but the disruption that a single animal causes to the fishery and the impact that it has on it, which is disproportionately large.

I emphasise that we are talking about confined spaces and shooting very small numbers of animals—in some cases, a single animal—which would have no impact on the general population in the close vicinity of the river.

Profe ssor Thomas: I add a word of caution: it is dangerous to make comparisons with other countries. The point that lan Boyd made is true. In Canada, many of the marksmen are sports marksmen. However, in Norway, seals are a hunted species and the people who shoot them are amateur huntsmen, if I can put it that way. Therefore, any statistics that we take from that tend to be unreliable when applied to our circumstance, which is extremely different.

Bill Wilson: I have a quick question for Libby Anderson. She said that Norway did not allow the shooting of seals in water. Does it have any techniques for identifying seals that have been raiding fish farms?

Libby Anderson: I do not know. I can tell you that other countries have a suite of measures that are similar to the list that Alasdair Morgan mentioned with regard to the amendments that we recommended. Professor Boyd may know the answer about the fish farms.

Professor Boyd: I do not think that Norway recognises that it has a problem with seals around fish farms, because it has so few seals.

Elaine Murray: If the main objection to shooting seals in the water is that the animal might just be injured and die a prolonged death, surely having a provision in the bill that a person should ensure, as far as possible, that the animal was killed would negate some of the objections.

Libby Anderson: All such recommendations can be seen under other regimes. It is for the Parliament to decide how practical they are. However, if they were practical, they would enhance the animal welfare conditions that the licences provide.

Alasdair Morgan: Surely the only practical condition that would not be equivalent to banning the practice would be one that applied to marksmen, their training and their rifle. We must assume that all marksmen are trying to kill the seal. Until they have fired the shot, we cannot say whether they will be successful. We can therefore never impose a licence condition that every shot must kill the seal.

Elaine Murray: But that is not the argument: it is about ensuring that the animal is dead. If it is not, it should be shot again.

Bill Wilson: Is the seal not liable to die anyway, once it has been shot?

Libby Anderson: Not immediately. A number of suggestions are aimed at preventing seals from dying long, slow deaths. Death from wounding could be from septicaemia or blood loss and could take a long time. One of the case studies in our briefing involved a grey seal that had been shot near the Bell rock and which had a wound to its eye. It was swimming around for at least 24 hours after it had been shot. I do not know whether it would have lived or died. I do not think that wounded seals are uncommon sights.

John Scott: To be gruesome about it, how does someone know whether they have shot and killed a seal? Does it lie on the surface or does it sink?

Libby Anderson: I think that they sink.

John Scott: Would that not be similar to a seal diving? If I were being shot at on the surface, I would dive. I am sure that seals are smart enough to do the same thing.

Professor Boyd: I am afraid that this reflects my past to an extent, but about 50 per cent of seals that are shot in the water will sink. However, training the marksman to shoot them at the appropriate time—when they are breathing in—can help to keep the seals afloat. Appropriate training regarding watching their breathing can therefore help to keep the animal on the surface.

Professor Thomas: For the sake of awareness, the issue is covered in the code of practice. Every salmon farming company in the SSPO, which covers 95 per cent of total production, uses trained marksmen. In many cases, a range of farms in an area will employ the same marksman. They therefore have a well-trained marksman who is familiar with dealing with seals. The industry takes the issue seriously because—frankly—the last thing that it wants is wounded seals washing up on shore. The industry would never want that image. When farms shoot seals, they do so because there is a problem that cannot be dealt with in any other way, and they shoot as effectively as possible.

Libby Anderson: I say, as I always have to say, that Advocates for Animals is not talking only about the salmon farming industry. I could cite examples whereby a salmon netsman has gone out and shot at a seal from a moving boat in the open sea. The difficulty of achieving a good shot in that situation must be plain for all to see. Professor Thomas made the point some time ago that nobody goes out to seal colonies and shoots them, but there are many documented examples of that happening, which I would be happy to give to the committee.

We must remember that, when talking about the licences, we are looking at exemptions from a provision whereby it has been decided that it will be an offence to kill a seal. If we give anybody a licence to break the law, we must be careful and rigorous about the conditions that we attach to it.

15:15

Elaine Murray: I want to move on to the issue of the health and welfare of farmed fish in particular, which the SSPO raised in evidence to the committee. As the bill stands, there is no provision to take into consideration the health and welfare of farmed fish; there is only a provision

"to prevent serious damage to fisheries or fish farms".

That raises the question of what serious damage consists of. I am uncertain whether the antipredator methods would prevent the fish from being distressed by the animal. The fish might become quite stressed if they see a seal swimming around trying to snap at them. I know that the industry, for commercial reasons, makes an effort to prevent the stress of fish, but there are also welfare issues. The industry has an obligation, as do all farmers, under the Animal Health and Welfare (Scotland) Act 2006, to protect the welfare of their animals. Should provision on the health and welfare of fish be specifically included in the bill?

Professor Thomas: My view is that it has to be. If you had seals damaging empty nets—if I can put

it that way—I do not think that people would get too agitated about it. However, it is not just about the damage to the nets; it is about the damage to the fish

Elaine Murray: Do the anti-predator methods prevent the seals from getting close enough to the fish to distress them?

Professor Thomas: No. Sometimes the seals can get in close. They can sometimes get under the nets or gain access via the walkways and slip down inside the net. They will also attack salmon from the outside of the net. That might result in few salmon getting bitten but a lot of salmon becoming stressed. The impact on the health and welfare of salmon is still significant. What tends to happen is that fish will die for a day or two after such a close-proximity attack.

There is a legal requirement on salmon farmers, or indeed any fish farmers, to protect their stock. It seems to us that that should be incorporated as a specific statement in the bill.

Elaine Murray: Is there a similar issue with the welfare of wild fish?

Brian Davidson: With wild fish, there is not as much of a welfare issue as there is with captive fish in aquaculture units. However, fish will get stressed. Rivers are quite confined spaces—not the natural habitat for a seal. When seals come into a narrow estuary or freshwater part of a river system, they can cause a lot of stress to groups of fish that are waiting to ascend. They also cause a high degree of disruption to the fishery itself. Given the economic value of some of the salmon fisheries, they take quite a hit. When one or two seals come into the estuary or river mouth, it can completely ruin fishing and it can have a damaging impact on the wild fish stock at times when fish are congregating in estuaries.

John Scott: Would the stress caused by seals getting into holding pools—shall we say—in the river be likely to have any effect on spawning outcomes? In other species, would stress affect the ability of their eggs to be fixed?

Brian Davidson: It is difficult to say. There has not really been any work done on that. The fish that the seals are impacting on are well down the river system. The fish will not be that close to spawning unless they are further upriver. In that sense, it is difficult to tell whether the seals are having an impact on spawning per se. Having said that, if the fish are stressed and they have been wounded, that will probably have a knock-on effect at some later stage in their life history as they ascend the river. It is possible that there would be an effect, but it is difficult to be categoric about that.

Bill Wilson: Section 105 states:

"The Scottish Ministers must not grant a seal licence authorising the killing or taking of seals in a seal conservation area unless they are satisfied ... that there is no satisfactory alternative way".

We have discussed satisfactory alternatives, but I notice that Advocates for Animals believes that the condition should be extended to all areas and not limited to conservation areas. I ask the panel for their views on that.

Libby Anderson: If I may, I will explain our view. Many of the areas that we have been discussing are seal conservation areas. If it seems feasible to put that condition on conservation areas, I cannot see why it should not be applied to other areas. That seems only reasonable.

Profe ssor Galbraith: An issue that comes on top of that is the cumulative impact. It is important to look at seal conservation areas in the light of what happens in other areas around the coast. We have to build our ability to consider the cumulative impact as part of an overall management plan. In addition, I suspect that there will have to be some flexibility within seal conservation areas.

John Scott: Professor Thomas alluded earlier to the potential need in some river basin management areas to manage the grey seal population in order to protect the common seal population. Will you comment further on that? Is there a relevant provision on that in the bill, should Professor Thomas's suggestion come to pass and the need arise to do that? Forgive me for not knowing the answer.

Profe ssor Galbraith: Should that ever come to pass, there is a provision on wildlife conservation, if I remember correctly, and I would expect the situation to be covered under that. Again, it highlights an information gap, to be blunt. There are several key areas where further research is needed, and the interaction between species is undoubtedly one of them.

Libby Anderson: The provision is in section 98(c), I think.

John Scott: Efficient as ever.

Professor Boyd: In purely practical terms, I cannot envisage a scenario arising where we actively managed grey seals and recovered the population of common seals by reducing grey seal numbers—I think that that is the implication of what we are discussing. As I said in my introductory statement, grey seals move through large areas, so in order to manage them on a regional basis, we would need to manage them pretty much on a Scotland-wide basis. If we wanted to reduce grey seal numbers in a particular region, we would probably have to reduce the overall number of grey seals. That is a complex, expensive and difficult process, and in practical terms it is unlikely to happen.

Bill Wilson: Should section 105 be extended?

Professor Boyd: It is sensible to maintain provisions for area-wide management in some form because we cannot always predict what future scenarios will bring, but in purely practical terms, it would be a difficult thing to do. I suspect that it will not happen.

Bill Wilson: Are you saying that section 105 should not be extended to all areas of Scotland?

Professor Boyd: I would need to look at section 105. I do not have the wording in front of me, but if you wanted to wait, I could look at it.

Bill Wilson: You can always write to us.

Professor Boyd: I will respond afterwards and give a considered response, if that would help.

Bill Wilson: That would be fine.

Professor Thomas: Just to explain, my comment is based on Ian Boyd's data. It is based on the fact that, in the areas where common seal populations have declined the most, grey seal populations have strongly expanded. I accept that we do not have the evidence to show that the two things are related, but in the circumstances it seems to me that the element of competition of species is at least a possibility. That is where my comment comes from.

John Scott: Where the balance gets out of kilter, perhaps for some unknown reason, a dominant effect develops, so to speak.

Professor Thomas: I just observe that grey seal numbers have rapidly increased in some areas where common seals have most declined. Are those two things related? I accept that there is no hard evidence, but the fact that those two things are happening simultaneously suggests that there could be, as lan Boyd said, competition for food sources in those areas or the surrounding areas.

Professor Boyd: I have now read section 105. The sentiment seems to be to provide Government with the capacity to manage at a regional level, but with the provision that that should not jeopardise the total population. The current wording of section 105 is sensible and appropriate, as decisions could be made at a regional level that would affect the total population. One wants to be careful about that.

Professor Galbraith: The reference to the EU habitats directive in section 105(b) is relevant. That takes us back to the earlier question about conformity between what is in the bill and what is in the habitats directive. One can see the need to report back through the habitats directive, so there will be an overarching need to assess populations regionally and nationally.

The Convener: We have touched a bit on policing and enforcing. Liam McArthur may want to expand on that.

Liam McArthur: Very briefly. We can all probably think of examples of legislation that is not working because it is not being enforced effectively. The conclusion is usually that we need to tighten up the regulations or introduce more legislation rather than better enforce the legislation that is in place. We have heard that there is some common ground regarding licensing provisions and a collaborative approach to putting together management plans. That suggests that there is some agreement on how we might tighten up the rules as they are applied, although that will be only as effective as the policing and enforcement of the legislation. I would welcome your views on how we can ensure effective policing and enforcement, whatever new requirements we put in place.

Libby Anderson: The bill does not require SNH—and, possibly, other parties—to scrutinise licence applications; yet, under section 10 of the Conservation of Seals Act 1970, the police are required to consider licence applications and that act deals with a much smaller number of licences than we are talking about in the context of the new regime. It is important that we are aware of who is being given licences. I have seen comments and queries about the applicants on licence applications—not about the boards, but about the particular individuals. Some of that could be addressed by pre-scrutiny, as it were, as much as by enforcement. Enforcement is difficult in dealing with any wildlife crime.

Professor Boyd: Historically, there has been a problem with the enforcement of the legislation. It has not been effective. I would like to see wording in the bill that makes the procedures for its enforcement effective; otherwise, it will be difficult to enforce. I agree with Libby Anderson that legislation against wildlife crime is difficult to enforce. It is often difficult to provide categorical proof of an offence having been committed.

Liam McArthur: Will the enforcement be more effective if it is established through a collaborative approach such as you cited in relation the Moray Firth management plan? Or will it require greater resources to be invested in policing, Marine Scotland to be responsible and pre-scrutiny of licence applications to be carried out by SNH?

Professor Boyd: My personal view is that relatively few people are licensed to carry out shooting and they are fully trained. The local constabulary knows who those people are and liaises with them. Also, as you correctly point out, the local stakeholders know who those people are. Therefore, if shooting occurs and it is not carried out by one of those individuals, it is easier to identify, report and gather evidence on.

Peter Peacock: There is some debate about whether the number of shootings should be reported annually or as individual incidents. If, as you suggest, only relatively few people are licensed to carry out that activity, will they have an obligation as licence holders to report every individual shooting? If so, is that reasonable?

Professor Boyd: Yes, that would be essential.

15:30

Professor Thomas: Reporting shootings by someone with a gun licence would be part of any system. However, the difficulty in the bill is the proposal that every time a seal is shot a report must be made as soon as is reasonably possible. Our stance, which reflects the SSPO's stance, is that it would be logical to include in the statistics report on Scotland's seal population that is produced annually by Professor lan Boyd's unit a section on seals that have been shot.

Peter Peacock: But would that not cut across the requirement for a report to be made when a seal is shot by someone licensed to do so? At the moment, it is illegal to kill a seal. If exceptions are to be made, is it not entirely reasonable to ensure that, every time it happens, it is reported?

Professor Thomas: It is a question of proportionality and what we do with the figures. I have no difficulty with the requirement for a report, but it seems disproportionate to require a report to be made seal for seal. To me, the logical solution is for everyone with a gun licence who is authorised to shoot seals to produce an annual report that sets out the date of each shooting, the circumstances behind it and so on.

Peter Peacock: Surely, as far as systems of accountability and the ability of the whole system to monitor what is going on are concerned, the administrative burden would be just the same. Is there any difference in effort between someone writing down at night the details of, say, the two seals that they shot that day and submitting the report in an e-mail the next morning, and someone waiting until the end of the year and bringing all those details together?

Profe ssor Thomas: Given that each report has to go somewhere for someone to do something about it, the effort is actually doubled. The costs are certainly doubled. One has to ask what the gain would be. I am not a fisherman, but the Association of Salmon Fishery Boards might be able to comment on, for example, returns from the number of salmon that are caught. There is no point in having a plethora of statistics unless they are in a form that we can do something with.

Bill Wilson: Would the requirement to report on each shooting not improve the reporting of wildlife

crime and make it easy for the police to check whether a seal has been shot legitimately?

Profe ssor Thomas: As has been pointed out, wildlife crime is a difficult issue, but I suspect that the problem is not people with licensed guns but those who are completely outside the system.

Bill Wilson: I accept that. However, if a shooting takes place and nobody with a gun licence has reported anything, the police can fairly quickly confirm that it was illegal and not carried out by a licensee. If, on the other hand, there is a shooting and a report has been made, the police can say, "Ah, the licensee shot a seal on that day. We'll talk to him to make sure that was the seal."

Profe ssor Thomas: That is conceivable, but we are talking about a very small number of marksmen in areas that are well known. If, for example, a shot seal washed ashore, the police would have no difficulty in finding out whether it was wildlife crime. As I say, it is a question of proportionality, and our concern is to establish a workable system without creating some huge bureaucracy to deal with the numbers.

Professor Galbraith: Although I accept what Professor Thomas has said, I think that we have to recognise that wildlife crime is a huge problem for the country and affects the external perception of Scotland. In this and all other cases, we have to take whatever measures we can to counter the tendency to break the law.

It is important to put in place a transparent and credible system that we can all believe in. If we could get such a system in place, it would benefit everyone, from the animal welfare side through to the industry side. We advocate a transparent system that builds on the credibility of the data that SMRU already gives us on the overall population numbers. If we could get credible data on the numbers that are shot and when they are shot, that information could be built into population models and incorporated into ideas about what the licensing capacity could be. We put great store in enforcement, linked to a partnership approach involving the industry, SNH and animal welfare.

The Convener: It looks as though there is some overlap with the current consultation on wildlife crime.

Profe ssor Boyd: Another angle to the arguments that is separate from enforcement concerns the fact that we would be likely to set the total limit on the number of seals that could be shot on a regional basis. In order to police that limit properly, it will be important to get on-going reporting of the number of animals that are shot so that fish farms are aware when they are getting close to their limit even though they might have, for example, six months still to go in the year. If we do not do that, we might get to the end of the year

and find that fish farms have exceeded their limit by double the permitted amount. From the point of view of management, as well as enforcement, there is a need to know what is going on.

Profe ssor Thomas: We do not have the proper basis for a scheme yet—we have not yet reached that level of detail—but fish farms operate on the basis of farm management areas. A group of fish farmers in an area will have management agreements that run across that area. I expect that, whatever licensing system is in operation, it will operate at that level, which means that farms will share information about the number of seals in the area.

The Convener: In its submission to the committee, Tara Seal Research said that

"At present the law protecting animals from disturbance in the UK is fragmentary and disorganised"

and that there should be an offence of

"disturbing or harassing seals, or of obstructing access to their haul-out sites".

Do you have any views on that?

Libby Anderson: We whole-heartedly agree with that. Such a provision would be analogous to the protection that is given in other legislation to other fish-eating species, such as dolphins and other cetaceans. In my submission, I drew to your attention the fact that section 75 of the bill provides for an order to prohibit the killing, taking, destruction, molestation or disturbance of animals in the particular protected area, and I said that it seems entirely appropriate to extend that to seal areas, too.

Professor Boyd: I would broadly support such a provision. A possible consequence of tighter management could be that harassment becomes a tool that is used in certain quarters for trying to reduce the number of seals in a particular area. Repeated harassment of animals at haul-out sites could be a problem in the future. I do not believe that is a problem just now, but it is sensible to think ahead.

Professor Thomas: From an industry standpoint, harassment would not be an issue of interest, as the industry never does that. However, there is an issue with the fact that a good deal of tourist activity of one sort or another takes place around seal haul-outs. If a harassment provision were included in the legislation, it would need to written carefully to avoid criminalising people who are innocently engaged in wildlife observation and get a bit too close.

Liam McArthur: In my constituency in Orkney, it is hard to go on to a beach at certain times of the year without coming upon a seal colony, some of which are of quite large numbers. You do not have to get too close to them before they are likely to

disappear into the water. It is not difficult to see how that might be viewed as harassment or disturbance, so I echo Professor Thomas's comments about the need for careful drafting.

John Scott: Perhaps there should be special protection at breeding times or—if this is the right expression—pupping times.

Professor Galbraith: The points that I was going to make have been covered. It is true that there must be some sort of tourism code that ensures that boats do not harass seals, and it is also true that harassment might become part of a protection strategy for any salmon farm. Is harassment better than shooting? That is a judgment that could be made. Liam MacArthur's point that, in some areas, people will unavoidably come across seals on beaches is true as well. I agree that careful drafting is necessary.

The Convener: I thank the witnesses for their attendance. Any supplementary information should, ideally, be with the clerks by Friday so that it can be circulated to members in time to inform our final evidence-taking session on the bill on 9 September.

I suspend the meeting while our next panel of witnesses comes to the table.

15:42

Meeting suspended.

15:47

On resuming—

The Convener: I welcome the second panel of witnesses: Rob Hastings, director of the marine estate within the Crown Estate; Captain Nigel Mills, director of marine services, Orkney Islands Council; and Walter Speirs, chair of the Association of Scottish Shellfish Growers. We move straight to questions, beginning with Peter Peacock.

Peter Peacock: I will start with island issues, so it is really a question for Captain Mills, but others can comment as they see fit. We have had evidence from Orkney Islands Council and Shetland Islands Council about the Orkney County Council Act 1974 and the Zetland County Council Act 1974 respectively. I declare an interest as a former employee of Orkney Islands Council. I never fully understood those special acts. Perhaps Captain Mills can explain the basis of them, their implications for the bill and the interaction between the two sets of legal provisions.

Captain Nigel Mills (Orkney Islands Council): I thank the committee for the invitation to give evidence. I will qualify my answers by saying that I am not a lawyer—

Peter Peacock: That is a great benefit in life generally.

Captain Mills: Anything that I say will be from a layman's understanding.

As you say, the acts are quite complicated. The Orkney County Council Act 1974 gives Orkney Islands Council power as a harbour authority, provides for protected development rights and allows for works licences to be issued in relation to fish farms and other developments. For a long time, it stood, along with the Shetland act, alone in terms of local authority provision to deal with marine-based planning. Our planning department is now starting to use the Orkney County Council Act 1974 to examine marine activities. The department is primarily a terrestrial planning authority, but because of the harbour authority element of the 1974 act, it takes an interest in certain areas around the coast.

With regard to the bill, we are concerned to ensure that there will be no conflict between the council, which believes that it has primacy over certain provisions, and NGOs and Marine Scotland, which may effectively take over those provisions. That is one reason why I am here today. We want to clarify any areas on which there might be conflict. Other than that, I am struggling to answer.

Peter Peacock: To be absolutely clear, the difference between Orkney Islands Council and its neighbouring authority to the south, Highland Council, is that Orkney Islands Council is the harbour authority for all the islands, whereas Highland Council is not the harbour authority for all its area. Along with that status, Orkney Islands Council has statutory obligations and powers, and the democratically elected council ultimately makes decisions about the issues. Under the bill, a proposal for a marine planning partnership in Orkney could conflict with that role. Is that where tension might arise?

Captain Mills: There is a potential for tension. If you understand the geographical nature of Orkney, you will know that Scapa Flow is a huge inland waterway in south Mainland. Orkney has harbour authority rights over that area and the area around Kirkwall and in Kirkwall Bay, as well as over various piers in the islands that support the interisland ferry network. The council is a statutory harbour authority for all that area. The only deviation is that St Margaret's Hope Pier Trust manages a small port in the south-east corner of Scapa Flow. In the Highland area, although the council has harbour authority control in some areas, there are several private or trust ports. Like all local authorities, we also have responsibilities for our coastline. There are subtly different areas of control.

The Orkney County Council Act 1974 gives us the right and power to dredge. Under the bill, that will start to get complicated, because dredging will be a licensable activity and there will therefore be a power to refuse a dredging application. Although I have an obligation to keep clear, for example, the channel into Stronsay, a non-port authority body could refuse to allow that. Under the ports element, I have to keep the channel clear and I need to dredge it because, over time, the sand in the banks slips and the channel silts up, but I might be prevented from doing that. There might be a conflict in that area.

Liam McArthur: The written submissions from Orkney Islands Council and Shetland Islands Council refer to the identification of marine areas. Orkney Islands Council states:

"Orkney waters and the Pentland Firth should be identified as a stand alone Scottish Marine Region or Marine Planning Partnership".

Up front in its submission, Shetland Islands Council suggests that

"Shetland be designated a 'stand alone' Scottish Marine Region".

As Captain Mills will be aware, the bill makes no stipulation on that, other than stating that the matter will be determined in secondary legislation. Would having the designation in the bill help you, or does it not matter, as long as such a designation comes through secondary legislation?

Captain Mills: The nature of the bill is that it is non-specific on many issues. It contains little detail on the criteria that will define regions. It would have been helpful for Shetland, Orkney and the Western Isles to know the thinking behind the measures, such as the way in which ministers intend to form regions, how many regions there will be and the criteria that will be used to create them. Orkney and Shetland councils believe that their areas are absolutely perfect to be autonomous areas. We do not see ourselves sharing with anybody. We contest that the geographical nature of the islands supports that.

It would have been great if, up front in the bill, there were criteria on how the regions are to be defined. If they will be outlined in statutory instruments later on, we can consider them then. However, we strongly urge the committee to consider areas such as the Western Isles, Shetland and Orkney whose geography means that they should be designated as autonomous regions. We fully accept, though, that the Pentland Firth is an awkward area. We have Highland as our neighbour, and there is the obvious industrial interest in the firth as an area for marine energy, through Crown Estate leasing—a lot of interest has been expressed in that of late. There could be sharing in that area. It is difficult to draw a line in

the Pentland Firth and say that anything to the south of the line should be looked after by Highland and anything to the north by Orkney. There is potential for partnership working there, which we accept might evolve slowly. In general, however, we would consider ourselves as an autonomous region.

Liam McArthur: Peter Peacock touched on possible areas of conflict. Do you have a clearer idea of how a marine planning partnership might work in an Orkney context, assuming that the area is designated as a marine region, along with the Pentland Firth?

Captain Mills: No. I do not have a template for that.

Liam McArthur: Shetland Islands Council has indicated that some of the responsibilities that flow from the bill will create pressure on its budget. Can you say at this stage what the cost implications might be for your council?

Captain Mills: Not until the statutory instruments tell local authorities exactly what is required of them and whether they are to be in control of marine regions. The bill indicates that different organisations could control regions, but if it is the local authority, we will need to know exactly what will be required. Our terrestrial planners tell me that they are stretched already, so it is inevitable that any additional weight on the local authority would result in greater costs. We hope that that cost would be reflected in reduced spend on other regulators. I attended the sustainable seas task force, where there was an underlying thought that as regulation moved across, there would be a decrease in spend on some of the other organisations, which would reflect the weight of the legislation and the bureaucracy that it creates. There should be a movement of resources. We are keen to see how that will be reflected in funding to local authorities. which have to carry the weight of planning applications and the creation of regional plans, for example.

Elaine Murray: I want to get the views of the panel on responsibility for licensing fish farming. The Crown Estate's position is that it would be more appropriate for licensing decisions to be taken by Marine Scotland, so that there would be a more strategic approach. At a previous evidence session, Professor Phil Thomas argued on behalf of the SSPO that the industry would prefer a more strategic national approach to licensing. On the other hand, I believe that Orkney Islands Council has argued that licensing decisions should continue to be taken locally. What are the views of the organisations present on what would be the preferable approach to licensing?

Rob Hastings (Crown Estate): The notion of centralising licensing as a planning function is attractive. In our experience, the common issues in these sorts of development activities make centralisation practical and pragmatic. There may be an opportunity to delegate some responsibilities locally; as the Crown Estate is not a regulator, we would stand by and support that if it was absolutely necessary.

There are common issues in most of the activities that we get engaged with. It would be quite pragmatic and sensible to build some of those issues into the marine policy statement, or at least to have policies that roll right down to what is happening on the ground.

16:00

Walter Speirs (Association of Scottish Shellfish Growers): Our association would very much welcome a national framework. I am sure that that could not be created without the involvement of local authorities, so there would be a question of how that was structured. A national strategy for aquaculture in Scotland would be welcomed.

Captain Mills: Perhaps I can give some practical examples of why local influence, attention and planning powers are paramount. Recently, I met representatives of a local fish farming company in the harbour office prior to an application being submitted to the planning authority. Such applications can cost thousands of pounds to prepare, but people can currently come to see the planning authority, which in this case was the port authority because the proposed farm was to be positioned in Scapa Flow. By working through a range of different scenarios that could have affected the licence application, we were able to point the company in the right direction to ensure that the work that it undertook would result, as far as we could see, in a positive result without the application being objected to. That saved that company tens of thousands of pounds. If we had not been able to exert such influence, the company could have spent an awful lot of time and effort on the application without getting anything up and running.

At the other end of the spectrum, some fish farm cages last for only three to four years and tend to be hauled out and left on beaches when they come to the end of their life. With all due respect to the Crown Estate, the owner might take no part in cleaning up the beach and the cages might simply be left there. The port authority—or, wearing my other hat, the local authority when the matter is outside the port—must then find ways to have the cages removed, either by using byelaws or by threatening the fish farmer that it will not renew his licence. That is sometimes the only way

that we can get derelict and redundant fish farm equipment cleaned off beaches. Because of the expense involved, it is a lot easier for the farmer to haul the cages out on to his land and leave it on the beach for five or six years. That happens.

For Orkney, having the local plan and the ability to license and effect clean-up is very important. If that power was lost to a national body, I am not sure whether it would protect the islands. We need to work hard on the issue. If the power went back to the Crown Estate, which dealt with licences a few years ago, would the islands receive the same protection?

Elaine Murray: The suggestion was that Marine Scotland, rather than the Crown Estate, should have powers over licensing but should be able to devolve those powers to local authorities where appropriate. Would that not be sufficient?

Captain Mills: We already have the power, so why take it away only to give it back? That does not seem to be very reasonable.

Bill Wilson: If the Crown Estate dealt with licensing a few years ago, was there a build-up of rubbish at the time?

Captain Mills: The power has rested in Orkney since 1974. The Crown Estate dealt with licences in other areas of Scotland until recently, but they have been dealt with in Shetland and Orkney for a considerable amount of time.

Bill Wilson: Do you know whether such build-up of rubbish was a problem in other areas?

Captain Mills: Shetland and Orkney are the only areas that I have worked in.

John Scott: I suspect that Walter Speirs might be able to answer.

Walter Speirs: When the Crown Estate was responsible for allocating leases, we had one authority that took the same view for the whole of Scotland. For 10 years now, we have had a very unsatisfactory interim procedure that has involved great uncertainty for the future of our industry in knowing whether consent will be granted. We have had differences of opinion from different planning authorities. Without doubt, Shetland has been the shining example of the development of the aquaculture industry—those of us in other areas are slightly jealous of that—but that does not mean that all areas should not come up to the same speed. What is missing is a national strategy, which perhaps existed when the Crown Estate was in charge.

Another point about the bill relates to stakeholder groups, which I understood would have an influence on what happens in the marine environment. If the stakeholder groups are not to have any influence over what happens in the first

mile, they will not be terribly interested in what happens beyond it, given that inshore development is what stakeholders wish to have an interest in. If they are not going to have an interest in that first mile through the legislation, how will they assist the decision-making process?

Liam McArthur: The national plans will include economic, social and marine ecosystem objectives. I appreciate that Shetland is held up as the shining example of the development of the aquaculture industry. That grates with no one more than it does with those of us who live on Orkney, but in a sense it reflects the priority that Shetland Islands Council has given to the matter. Perhaps Captain Mills's point is that it will be up to local planning partnerships to determine between competing interests and how planning decisions are taken. I appreciate that that might not result in consistency throughout the country, but that is local democracy for you. As long as the approach complies with the other objectives that are set out in the national marine plan, that is surely to be applauded.

Walter Speirs: Does Scotland want to develop its aquaculture industry—yes or no? If the answer is that it does in Argyll but does not in Highland, that will be quite frustrating. There is a national strategy to have more wind, wave and tidal power. If there is to be a strategy to develop our industry, it must be a national strategy. A regional approach cannot be taken. We cannot say, "We'll have aquaculture in Shetland but not in Highland."

Liam McArthur: But it seems that there will be a levelling up as opposed to a levelling down. To some extent, is it not the responsibility of those in Highland to decide their priorities?

Walter Speirs: If they so wish, but Highland or Argyll and Bute may decide that tourism is more important than aquaculture in their development strategies, and that they want marinas and yachts rather than fish farms. Their priorities may be completely different from those of Shetland. That takes us back to the question, what does Scotland want from its aquaculture industry? If the Government cannot say to local authorities that it wants to develop the industry and give them growth targets for the industry, will that development happen?

Liam McArthur: I am not entirely sure that I buy the argument that a Government strategy should determine in every instance the decisions that local planning partnerships and councils should take on the priority that they attach to competing interests. I presume that such an approach would bring the bill as it stands into disrepute.

Walter Speirs: I see the approach in other areas, such as in recycling and in the amount of energy that is to be generated by renewable

means. The Government puts demands on local authorities to achieve certain things because of what the nation wants. I am sorry, but that is how I see things.

The Convener: Are you saying that local authorities have turned down many applications for shellfish farms?

Walter Speirs: In the past 10 years, there has been a lot of uncertainty because of the interim procedures that we have fallen into in transferring power from the Crown Estate to local authorities. We have just reached the point at which local authorities are about to take over; we have also just about reached the point at which we are going to change everything again. There has been uncertainty about the chance of success of aquaculture licensing applications. There has been a greater chance of success in some areas than in others. There is a lot of aquaculture in areas where the local authority has favoured allowing it to develop.

John Scott: Will you expand on that? It is obvious that you are concerned that specific areas, such as Highland, have not developed aquaculture. Is that the case? Have other areas not done so? Your plea is for consistency throughout Scotland.

Walter Speirs: The plea is for consistency. I do not want to be negative and point my finger at any local authority. I have highlighted Shetland on the positive side.

John Scott: I turn to shellfish issues. My questions are again for Mr Speirs in particular. In your written evidence, you say:

"Far from 'de-cluttering' marine regulation, it appears to be getting more complex, especially if you include the Marine Strategy Framework Directive, and the UK Marine Policy Statement."

Will you explain the regulation that shellfish growers in Scotland now face? How will the bill change that?

Walter Speirs: When I first heard about the proposal for the Marine (Scotland) Bill, I was optimistic that it might change things for the better for our industry. However, as the consultation process has developed, it has begun to look as though not many things are going to change. There is not going to be a slimming down of regulation; we will have to deal with the same number of regulators as before. As it stands, we are probably not even going to have anything to do with the bill. If the responsibility for planning out to 1 mile remains with local authorities-which is current proposal—and river management plans and the water framework directive will look after the sea out to 3 miles, the bill will have nothing to do with us. If the bill does not kick in until 1 mile offshore as far as planning is concerned and 3 miles offshore as far as our main regulator is concerned, nothing will change for us.

At the moment, a lot of changes are proposed in the environment in which we farm, and we want to be certain about where we should focus our attention regarding those changes. It appears that most of the changes that will affect us will come under river basin management plans and that SEPA will be the competent authority, so I feel that I should turn my attention to working with bodies on that, rather than on the bill, because the bill will apply further offshore than we currently operate. It is confusing for the bill to talk about aquaculture when it is probably not going to touch on aquaculture if it is passed as currently drafted.

John Scott: I do not want to pre-empt a question that Peter Peacock will ask, but is that a matter of regret to you? If so, what do you suggest should be different about the bill?

Walter Speirs: The uncertainty is the most difficult thing to deal with. Personally, I think that Marine Scotland should take charge right up to either the high or low water mark—right up to the beach. It would be better for Marine Scotland to look after river basin management plans and act as the marine champion as well as being the one regulator that we have to look to for the protection of our water, for our licences and for all the regulation that we have to deal with, including that part of the Food Standards Agency's remit that extends into the area in which we work. My preference is for one authority to deal with most of the things that are currently dealt with by several different authorities.

John Scott: You are looking for simplification, but you have not found it in the bill.

Walter Speirs: Simplification and certainty. Certainty would be nice and may come soon. As soon as we know what has been decided, we will know where to focus our attention for the protection of our industry regarding issues such as water quality and invasive non-native species.

The Convener: That neatly leads us on to Peter Peacock's question.

Peter Peacock: One of the uncertainties that you highlighted when committee members visited Oban for an informal meeting at the Scottish Association for Marine Science laboratory was the designation of shellfish growing waters that is currently required. You said that there is some uncertainty in your mind about whether there will continue to be a designation. Since our visit, the Scottish Environment Protection Agency has given us evidence and has sought to reassure us on that point by saying that a similar approach will continue to be taken. Also, a parliamentary question has been answered that sought

reassurance for you. Nevertheless, you are not yet reassured. Can you say a bit more about what reassurance you are seeking from the Government?

Walter Speirs: The protection that the industry currently has is the designation of shellfish growing waters. Shellfish harvesting waters are also designated, but that is on the food side of things. The designation that protects shellfish growing waters under European Union legislation will be lost when it is wrapped up in the water framework directive. We will not have a designation under the water framework directive. The important thing about a designation is that it provides something tangible to protect us. SEPA says that it will give us equivalent protection, but that is not legally the same as giving a designation. Various designations are given to bodies of water, and if we do not have a designation we may find that areas that are designated for another reason will no longer be suitable for our form of aquaculture. The protection that we are seeking is a designation, not protection that is equivalent to what we had. I understand that there is talk of Brussels issuing a daughter directive to address the issue, because other member states where shellfish farming is carried out have identified the same problem. There is no certainty. All we are looking for is the equivalent of the protection by designation that we had under the shellfish growing waters directive.

16:15

Peter Peacock: Notwithstanding what happens at EU level, is there a way in which the Government could provide that in the bill? Could there be a requirement for Marine Scotland and/or SEPA to continue to designate shellfish growing waters?

Walter Speirs: Yes. Under the water framework directive, assuming that SEPA will be the competent authority, it could give us a designation. However, that might be a member-state issue rather than a devolved issue. I have not quite got to the bottom of that. In theory, SEPA has the ability to designate our waters.

Peter Peacock: Would you like the minister, when he comes to give evidence to the committee, to offer—among many other things, no doubt—a reassurance that the protection that designation currently provides will continue, albeit that the mechanism might not yet have been decided?

Walter Speirs: Yes. That would be nice.

Bill Wilson: In your submission, you referred to the listing of the Pacific oyster as an invasive nonnative species in England and Wales. I might have misread your evidence, but I get the impression that you are not ecstatic about that.

Walter Speirs: No.

Bill Wilson: Would you or other members of the panel like to explain the significance of that listing, what its implications are for the industry and whether the bill is the place to address such issues?

Walter Speirs: We grow oysters in the sea, which I guess is part of the marine environment, so the issue probably comes under the bill, but if it is covered under the water framework directive, the river basin management plans are the place to address it. That aside, the implication of the Pacific oyster appearing on the invasive nonnative species list is that there are proposals for a ban on the sale of invasive non-native species.

The other complication is that, under the river basin management plans, it is not possible to achieve the highest level of ecological status for a water body if there is an invasive non-native species in it, so not only does the listing threaten our industry and the sale of our product, it means that water bodies that contain Pacific oysters will not be able to achieve the highest quality.

The word at issue is "invasive". We are all aware that the Pacific oyster is a non-native species. Pacific oysters were brought here by the British Government 30 or 40 years ago because that was seen to be the right thing to do. In Scotland, they are not invasive—they do not move and they cannot swim or fly away, so they should not be in that category. The situation might be slightly different on the south coast of England, where water temperatures are much warmer, which means that it is possible for the animal to spawn. When the oysters spawn, they can settle somewhere on a beach, as has happened in a few isolated places.

Bill Wilson: You are saying that there is no larval movement of oysters in Scotland.

Walter Speirs: Currently, water temperatures here do not come near to reaching the temperature that is required for the oysters to spawn.

Bill Wilson: What rise in water temperature would be necessary to enable the oysters to spawn?

Walter Speirs: I cannot give you a number.

Bill Wilson: I asked the question because we face global warming. If that results in a rise in water temperature, it is possible that a species that is in Scotland that is not presently invasive could become invasive.

Walter Speirs: That is quite possible. I cannot give you a number; I could probably come back to you with one. If the water did get that warm, we

would have an awful lot more to worry about than a few oysters. [Laughter.]

Bill Wilson: Well, possibly. How much warmer is the water in the south of England?

Walter Speirs: I do not want to say something when I do not have the facts at my fingertips to back it up. I would guess that there would be a 10° difference in water temperature between the south of England and here, but I am not—

Bill Wilson: 10°C? That seems—

The Convener: We can probably get the Scottish Parliament information centre to look into that for us.

Bill Wilson: That might be interesting. Do any of the other panel members want to comment?

Captain Mills: Not particularly.

Bill Wilson: Does the Crown Estate not sit on the native oyster steering group?

Rob Hastings: We do.

Walter Speirs: I am talking about Pacific oysters.

Bill Wilson: I understand that, but if there are arguments around niche displacement, or perhaps a decline in oysters and the possibility of spawning, that presumably affects native oysters, which is why I thought that the Crown Estate might have a view on the matter.

Rob Hastings: We might have one, although I do not have the details at my fingertips. I can certainly come back to the committee on it.

John Scott: If you are seeking a change in the designation of the oysters from non-native invasive species, how would you define them?

Walter Speirs: We accept that they are nonnative, as are many other animals that we farm and plants that we grow in this country. The debate is about whether or not they are invasive.

John Scott: Is there also a category in the definition of species to specify non-native species? Would that have a beneficial effect?

Walter Speirs: In France and Spain and, I am pretty certain, Holland, it has been accepted that the species is naturalised, not non-native. That is the word that is used in the rest of Europe.

On the point about native oysters versus Pacific oysters, there is no question of displacement of the native oyster by the Pacific oyster. The native oyster has been almost completely fished and polluted out of existence in Scotland. The body to which you referred, Mr Wilson, is considering the re-establishment of the native oyster population, initially in the Forth and some parts of Orkney and Shetland. That is a restoration project. However,

there is no overlap, and there is certainly no question of the Pacific oyster taking over the habitat of the native oyster.

John Scott: Without those Pacific oysters, and notwithstanding whether they are invasive or not, we would not have an oyster industry.

Walter Speirs: The native oyster in Scotland does not like being kept in captivity, and it could not be used as a substitute species to farm. It could be ranched or managed on managed beds, as it is in some areas in England, but it could not be a substitute for the Pacific oyster. Without the Pacific oyster, we would not have an oyster industry in Scotland.

The Convener: Do you wish to go on to your questions about the Crown Estate, John?

John Scott: Thank you, convener. Does the Crown Estate consider that the provisions in the bill that relate to planning provide a robust basis for marine plans to be produced to the highest standard, or should they be drafted differently?

Rob Hastings: The details in the bill indicate that that is possible, although there is still some work to be done following the primary legislation, whereby the details as to how it could work may be given out. In principle, from what we have seen, we are supportive of the overall framework, which offers a relatively integrated approach. It seems to pick out the priorities.

We feel strongly that the bill's conservation objectives should be set out clearly from the outset. There should be a recognition of the presumption of use, in planning terms, and there should be an ability to deal with uncertainty due to a lack of data, for example. It should also be recognised that people try to do two things when managing a planning process: satisfy their objectives and continue with development in the absence of data. Those challenges are difficult to square off, but they are very important. It is critical that a sustainable approach should satisfy the three pillars of the environmental, social and economic objectives.

The bill seems to deal with those issues quite well, judging from what we have seen from the framework. The devil is in the detail as far as the actual implementation is concerned. It will take a bit more work through secondary legislation to see it through.

Peter Peacock: You mentioned in your submission the challenges of integrating the national planning framework, the river basin management plans and the proposed new national marine plan. Will you say a bit more about what might be required to help achieve integration between those potentially discrete forms of

planning? How would you link up terrestrial and marine planning, which also interact?

Rob Hastings: The principal issue is to ensure that the policy is robust enough to provide the framework within which the instruments will sit. In our experience in other matters, unless that framework exists, there are some serious practical difficulties in making those things come together. The need to understand how they connect is fundamental. The policy framework itself is the essential bit. The detail at that level is the piece that has often failed. It is a matter of trying to put it together.

Peter Peacock: Must the policy framework that you are talking about be set by the Government and applied to the water framework directive, terrestrial planning and the Marine (Scotland) Bill? Should there be, for example, a clear national, Government priority to promote fish farming or to develop offshore wind power so that everybody is clear about those matters, everybody works to the priorities and the various constituent plans take account of them? Is that the key to the matter and is it a Government responsibility?

Rob Hastings: Absolutely. The Marine (Scotland) Bill provides a wonderful opportunity to achieve that. Some of the directives that influence us are clearly not within the Scottish Government's control—for example, the European habitats directive, which will have to be observed in certain cases—but the bill is the one opportunity that we have to specify and translate Scottish objectives, whether a presumption in development or a conservation objective.

There is no doubt that that is a difficult, challenging thing to do. It will require living in the absence of data, as I said before. When we get into the detail and are trying to balance the various objectives of marine spatial planning, for example, dealing with a lack of data will be difficult. That takes us towards a risk management policy and thinking about how the deployment of the objectives is managed, as opposed to setting the objectives in the first place.

I reinforce the point that, with the bill, you have the opportunity to set down the policies. They clearly need to take account of everything else that surrounds them—some United Kingdom issues will need to be dealt with, as well as European and perhaps even global issues. Nevertheless, you have that opportunity.

John Scott: Given the proliferation of legislation that affects or is about to affect the marine environment, is there a danger that a lot of work will be duplicated or triplicated? Is there a danger of overlap between the requirements of different legislation and that you will have to do the same thing more than once? If so, does it make sense

for Marine Scotland or the Government to show a strong lead, however that is articulated?

16:30

Rob Hastings: We certainly encourage strong leadership on that matter. The challenge is often the interpretation of existing legislation. Often, different legislation says the same thing, but when it comes to the detail of implementation and living to the letter of a particular law, that can result in different sets of actions.

I cite the example of interpreting what the habitats directive is really trying to achieve. We in the UK tend to be a little bit pedantic about what the directive is saying, whereas our European partners are not quite as pedantic as we are. In living to the letter of that law, we are making our lives difficult in trying to implement it. I am not saying that we should try to interpret laws to suit ourselves, but there is an opportunity for an entity to show a degree of leadership, interpret the legislation, put it into a policy framework that is designed to suit the needs of this nation and get on and deliver it. There will always be the opportunity to try to modify things or to address a misinterpretation or difference of opinion about how legislation should be implemented. However, there has to be follow-up management of what is executed. It cannot be a case of just sitting it out and expecting things to happen; things have to be followed up and driven through. Unless you have a clear set of directions from the outset, the opportunity will be missed.

John Scott: Is a hierarchy of legislation evolving, as it were? What would be top of the food chain? Would it be the habitats directive, the water framework directive or the bill, notwithstanding the fact that, although they may share some objectives, other objectives and outcomes might be contradictory?

Rob Hastings: My interpretation is that, with regard to marine matters in Scotland, the Marine (Scotland) Bill has to be the priority. Clearly, other things, which will always be there, have to be considered in the execution of that—in managing and delivering a plan.

Walter Speirs: That is certainly one of the issues. That is why we are going on about wanting a designation. So many different designations are now being applied to bodies of water. You can have one loch with several different designations, which is protected, governed or regulated by different regulators. This is the opportunity to see whether we can clear all that up. There has to be a system whereby there is a ranking of seniority of legislators or directives; otherwise, there will be continual conflict.

Captain Mills: Some of the designations are specific to certain areas in relation to the water framework directive and EU law on clean water and modified water. Some apply to rivers; some apply three miles offshore. There is a slight overlap, but I think they try to identify themselves separately. The people who work with the legislation have to decide whether they first look up EU law or Scottish law. I do not know whether that is necessarily clear to the lay person. Perhaps it has to be driven home which legislation you pick up first. I do not know whether general users of the law understand which legislation is most appropriate.

On the policy and strategy, under the national plan, which the regional plans would follow, surely there must be areas where the regional plan can deviate; otherwise, the regional plan becomes a photocopy of the national plan. Our diverse regions must have the ability to personalise their plans in some way. The marine environment is not geographically consistent, and even temperature and salinity are diverse. The North Sea and the Atlantic are completely different water bodies. We cannot allow a national plan just to spill out throughout Scotland and say that we will all do the same. The local plan must be able to deviate.

John Scott: To go back to Liam McArthur's point, how do you see that fitting in with national policy objectives? What should take precedence? I do not think that you commented on that. What should take precedence—the local council's position or a national plan?

Captain Mills: The stakeholders in the local area should have a large percentage of say over the destiny of their water bodies. The power should not be exported elsewhere. If the socioeconomics of tourism, shipping, fisheries and all the other uses that are made of a water body means that a community has bought into it, the community should have a large percentage of the say over what happens to it. I support local democracy deciding that, within certain guidelines. The Government of the day can set out a framework under which we all work, but when it comes down to the planning and use of an area, the people on the ground in that area should have a say on what happens in it. Orkney Islands Council is firmly of that view.

John Scott: I will leave it there.

Bill Wilson: The Crown Estate's evidence says that the designation process for nature conservation marine protected areas

"should also enable socio-economic factors and interests to be considered alongside requirements for improved nature conservation". and it welcomes section 59(5). Of course, section 59(5) only allows the taking into consideration of socioeconomic factors if two areas are of equal value in relation to designation. Should those factors always be taken into consideration, or are you content with the provision as is?

Rob Hastings: The Crown Estate's general position on where the socioeconomic input comes into the decision-making process is pretty consistent—our position is the same for whichever piece of legislation we are considering. If the objective is sustainability or sustainable development, three things have to be considered in parallel. Environmental objectives are clearly the primary driver, but without giving due consideration to the social and economic impacts of the decision, it is quite difficult to get a measure of its relative value from an economic conservation perspective.

The bill says that the provision in section 59(5) would be the tiebreaker rule that could be brought into play, and that is why we suggest that the socioeconomic perspective has to be considered as the tiebreaker. However, for all cases, and for a true sustainability argument to be presented, all three things have to be considered. An environmental objective might lead the process but unless the other two have been considered, it is difficult to get a measure of relativity in relation to the environmental objective that is being set out

Bill Wilson: I will turn the question around slightly. Section 59(5) allows for the fact that one might identify an area that meets certain requirements to be so designated, but it does not actually require the designation. In effect, the scientific evidence could be ignored. Can you envisage a circumstance in which an area is so important because of its biodiversity or scientific interest that it should be so designated, and the scientific or biodiversity interest should have complete priority?

Rob Hastings: There is absolutely a possibility of that being the case, but as a general rule, the general position that I outlined is what would apply in our minds. We are certainly frequently involved in designations in which it is absolutely clear, even without detailed supporting scientific evidence, that the designation of the area should be supported under very simple criteria.

Walter Speirs: That takes us back to the point about overlapping legislation. Phrases such as "significant impact" appear when it comes to designations. Who will decide what a significant impact is? The precautionary principle is also used as a tool in designation. Taking it to its extreme, no one would be able to do anything at all in the designated areas and the whole of Scotland could be put in mothballs under the precautionary

principle. There must be some help for us and for others who have to decide what constitutes a significant impact. Under the precautionary principle, a developer has to prove that they will not have a significant impact, but it is technically impossible to prove a negative. That is a bit of a logiam in the process.

Bill Wilson: But if there is no precautionary principle or anything like it, will there not be a risk that a development will be allowed to go ahead only for us to find out afterwards that it has caused significant damage to biodiversity, at which point it will be too late? I presume that there must be some system for saying, "We're not certain, so we'll err on the side of caution in this area because of its value." Do you not agree?

Walter Speirs: A balance must be struck. I am conservation minded, as is our industry. However, if everything was done under the precautionary principle, we would not be able to do anything. It is unfair to expect a developer—I am thinking of our industry, not others—to prove that having a shellfish farm or a mussel farm in a special area of conservation will not cause a significant impact. The onus would be on me to prove that there would be no significant impact, but there is no yardstick for me to use to decide what a significant impact would be. It would be almost impossible for me to prove that there would be no significant impact, as everything that everybody does every day has an impact. Who is to be the judge of what is significant in that context?

Bill Wilson: If a developer does not have to demonstrate that a proposed development in a special area of conservation will not have a significant impact, what would the industry propose as the standard by which a judgment can be made as to whether such a development can be allowed to go ahead?

Walter Speirs: There is no standard. If we could use the word "acceptable" instead of "significant", we would be moving in the right direction. Everything has an impact, but some impacts are acceptable. The building of wind farms or new motorways has a significant impact, but it is an acceptable impact. If every little sea pen on the sea bed is so important that commerce is not allowed to develop, our industry will find itself in a tricky situation.

Bill Wilson: Your argument is that your industry should have to show that the impact of a development would be acceptable—one that does not affect the biodiversity of the area or whatever the area has been designated for.

Walter Speirs: Yes. All that I am asking for is some certainty, as the situation is not certain at the moment. It is very difficult to prove or disprove the significance of a development's impact. Some

guidance on what constitutes such an impact would help. If the wording were changed to "acceptable impact", it would be useful to have a definition of what is acceptable. At the moment, the scope is so wide that it is almost impossible to come up with a logical argument for a development in an area.

Rob Hastings: I have two points to make. First—this may have been said already—in a conservation area, it must be made clear what the conservation objectives are for the area. Those may be obvious, but it is important to state them from the outset. If it is assumed that there is an opportunity to do something in line with those objectives, it is important for a developer to have a line of sight to understand what hurdles they need to get over. At the outset, that becomes their risk and, if it is clear what the objectives are and what the developer has to do to satisfy those objectives, they can set about a plan to achieve that.

Secondly, since we have embarked on offshore wind farm development activity, our knowledge of marine ornithology has increased tenfold. The reason for that is that developers have gone out to do extensive surveys and investigations, subject to very constrained criteria as to what they can and cannot do, in the full knowledge that they might still not be able to develop their wind farms at the end of the process. However, they do that work because they regard that outcome as an acceptable risk. Unless we allow such activities to proceed, with the developer accepting the risks involved, we will not get the data and knowledge that we will need to make a final assessment as to whether it is acceptable to undertake a particular activity in a designated area. We must be mindful of that, because we will find ourselves in a logiam if we take a purely precautionary approach to any activity in designated areas.

16:45

Captain Mills: One of the problems with the bill is that it uses explanations from other legislation. For example, the Natura 2000 sites primarily work at the level of significant effect. It is difficult for the bill to move away from areas on which legislation is already in place; it would be a conflict for the bill to deviate from such legislation. I agree that the significant effect level is extremely difficult. In fact, we work with SNH to do anything that we can to keep that term out and to prove that we are not even in the same ball park. If a project is labelled as having a significant effect, that almost certainly means that it will not go ahead in the way that we wish it to. I suggest that the socioeconomic element goes hand in glove with any designation, if it affects the wellbeing and prosperity of the community that will ultimately have to support a coastal area. I know that the bill's scope reaches out 200 miles from the coast, but it appears that it will mostly affect the near coastal region, which means working with the populations in that region.

The Convener: I am conscious of time running on and of the fact that we have a few more questions. I ask Liam McArthur to be concise in his questions and the witnesses to give concise answers.

Liam McArthur: I will be brief. Shetland Islands Council has thrown up in its evidence what it sees as a potential anomaly whereby those carrying out marine dredging, which has hitherto not required licensing, may be subject to a double cost: a licence fee, plus a sea bed lease cost. Can Rob Hastings comment on that? Perhaps Captain Mills can also offer an insight.

Rob Hastings: Effectively, the fees that the Crown Estate charges for any dredging activities remain unchanged. However, we are not clear on the precise total cost to a developer of licence fees, which would come out of a planning or consent application. If an additional cost resulted from that, it would be an additional cost for the developer. However, the current fee structure is common across the UK, and there has been no change to it. Nothing was built into that structure to deal with the regulatory process. We have not been exposed to, or party to, an additional cost for the regulation of dredging activity.

Liam McArthur: Can I tempt you into divulging the basis of the Crown Estate's fee structure?

Rob Hastings: We can certainly give you information on that, but it is quite complex—well, it is not that complex, but I do not have the detail to hand. I can provide it to you in writing.

Elaine Murray: The Crown Estate has indicated a willingness to develop certain marine areas in recent times, particularly for renewables. For example, there are developments in the Firth of Forth and the Solway. The development of such plans seems to be happening in advance of the Marine (Scotland) Bill coming into force. That has caused concern among people involved in fishing and so on in my area, who wonder how they will be consulted and what status such consultation will have. Can you say a little bit more about how the development of those sites and the work that is under way will fit in once the bill's provisions come into force?

Rob Hastings: We have been dealing with development activity for some time, and that will continue. We are respectful of the bill and its status. We are tracking and monitoring its progress as best we can to find out how we are likely to have to adjust our activities when it is enacted.

We have some relatively sophisticated processes for undertaking development activity. In

effect, we have a marine spatial planning system that we have adapted to our needs. The cornerstone of the system is sustainable development. When we consider a development activity, we measure its economic and sustainability values and then index it. That is a composite value that is constructed after quite a bit of research and work on understanding issues that are relevant to our activities on the marine estates. We have a highly representative set of indices that tell us how sustainable any of our development activities are. Part of the indexing involves dealing with localised social, economic or environmental impacts of the activity. All three of those issues are given proper consideration.

We undertake that fairly detailed process at the outset. We then evaluate and analyse as best we can with the data that we have. We have in excess of 200 UK-wide data sets, which incorporate all activities and environmental considerations. When we have sufficient data, we carry out a detailed and exhaustive analysis and come up with a result. That does not necessarily mean that the development will go ahead, because the next important step is the licensing and consenting process. We are not the regulator and, generally, we are not the developer either. We promote development activity and invite developers to go through the regulatory process. Whatever comes of that is subject to the regulator. If there is a balance to be struck between social, economic and environmental issues, that is the regulator's responsibility.

The Convener: The Crown Estate has a dual role, as it is a custodian of public assets as well as a revenue maximiser. In the first role, you operate in the public interest but, in the second, you are accountable only to the Treasury. In written evidence, Seafish has said that there is no mechanism for balancing those two roles. We understand that a memorandum of understanding is to be developed between the Crown Estate and the new marine management organisation that will be established under the UK Marine and Coastal Access Bill. Should the same approach be adopted with marine Scotland under the Marine (Scotland) Bill?

Rob Hastings: We would certainly encourage that. In effect, the Crown Estate is in large part a delivery organisation. We align ourselves with Government policy and work with the grain of it. For example, one big issue of the moment is renewable energy. To the best of our ability, we are aligned with the UK and Scottish Governments' renewable energy objectives.

When it comes to maximising the Crown Estate's value—bearing in mind that we are custodians of national assets—the income that we generate benefits the taxpayer. We have a duty

and an obligation to do that, and we do so responsibly, which is the important bit. As I explained earlier, we go through a fairly exhaustive process to examine the sustainability of what we try to do. That incorporates the socioeconomic impact—particularly the social impact. Therefore, if there are local social impacts as a consequence of our activities, we are fully aware of those.

In all the activities that we undertake—in effect, through our tenants and leaseholders—we are subject to the regulatory process, just as anybody else would be. If there is a balance to be struck between the delivery of a renewable energy policy and a social impact, for example, on fishing activities, any arbitration or discussion about that is not for us. In effect, that sits with the UK Government or the Scottish Government, as part of their decision-making responsibilities. We make as well-informed a decision as we can and then present a case, providing as much evidence and information as we can get. However, ultimately, the decision on the need for renewable energy or fishing activities offshore is not ours to take.

The Convener: As there are no further questions—

Walter Speirs: I would like to raise one little point that I did not mention in my written submission. It might or might not be relevant to the bill. In Loch Creran, where several of our members have oyster and mussel farms and which has several designations, permission has recently been granted for 100 new yacht moorings. It has been brought to my attention that there is no legislation that covers discharges from yachts when they are at a mooring. A marina must provide facilities to pump sewage ashore or to empty tanks. However, nothing in the existing regulation covers discharge from vessels at sea or at a mooring. We could have a situation in Loch Creran where several hundred people on yachts at moorings are flushing their toilets into an area that is designated for loads of different reasons. There would be no controls over that. I should have mentioned that in my submission.

The Convener: We probably need more information on that, so I ask you to provide it to us, preferably before Friday, so that it can be circulated to members to inform them for our final evidence-taking session on the bill, which is on 9 September. The same applies to the other witnesses, if they would like to provide further evidence. I thank our witnesses for attending.

That concludes the public part of today's meeting. I thank members of the press and public for attending.

16:57

Meeting continued in private until 17:09.

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