RURAL AFFAIRS COMMITTEE

Tuesday 21 September 1999
(*Afternoon*)

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CONTENTS

Tuesday 21 September 1999

RURAL AFFAIRS COMMITTEE
5th Meeting

CONVENER:

*Alex Johnstone (North-East Scotland) (Con)

COMMITTEE MEMBERS:

*Alex Fergusson (South of Scotland) (Con)
*Rhoda Grant (Highlands and Islands) (Lab)
*Richard Lochhead (North-East Scotland) (SNP)
*Lewis Macdonald (Aberdeen Central) (Lab)
*Irene McGugan (North-East Scotland) (SNP)
*Alasdair Morgan (Galloway and Upper Nithsdale) (SNP)
*Mr John Munro (Ross, Skye and Inverness West) (LD)
*Dr Elaine Murray (Dumfries) (Lab)
Cathy Peattie (Falkirk East) (Lab)
*Mr Mike Rumbles (West Aberdeenshire and Kincardine) (LD)

*attended

WITNESSES:

Dr John Davies (Marine Laboratory, Aberdeen)
Mr Neil Fleming (Scottish Executive Rural Affairs Department)
Mr Charlie Greenslade (Scottish Executive Rural Affairs Department)
Mr John Hermse (Scallop Dredging Association)
Mr John MacAlister (Scottish Fishermen's Federation)
Mr Doug McLeod (Association of Scottish Shellfish Growers)
Mr Bob Stubbs (Highlands and Islands Enterprise)

COMMITTEE CLERK:

Richard Davies

SENIOR ASSISTANT CLERK:

Richard Walsh

ASSISTANT CLERK:

Tracey Hawe

Scottish Parliament

Rural Affairs Committee

Tuesday 21 September 1999

(*Afternoon*)

[THE CONVENER *opened the meeting at 14:02*]

The Convener (Alex Johnstone): Ladies and gentlemen, it is a pleasure to welcome you all. For the benefit of those in the public seats, headsets are available under the chairs, and the sound for the meeting is on channel 1. If you can work out how the headsets work, they might be helpful.

Shellfish Ban

The Convener: The first item on the agenda is the issue of amnesic shellfish poisoning. The lead committee is the Health and Community Care Committee, but we have decided that it should be one of this committee's priorities as it is important that we understand the causes and effects of the disease.

We have invited a number of organisations today to give evidence. I welcome Dr John Davies, Mr John Hermse, Mr John MacAlister, Mr Doug McLeod, Mr Bob Stubbs and Mr Neil Fleming.

I propose that we ask each of the gentlemen to make their presentation to the committee. After they have done so, I will ask members of the committee to ask questions of any who have spoken so that we can follow a line of questioning that might move from speaker to speaker. That should allow us to bring out the intricacies of the matter.

It would also be appropriate to point out that, for many reasons, only those who are representing their organisations at the table should participate. It is difficult for comments made from the seats behind to be recorded in the *Official Report* because there are no microphones. It would also be slightly irregular for discussion to extend into the public area. However, if any information needs to be transferred, please feel free to approach the table and pass it to the representative.

I will begin the discussion by inviting Dr John Davies, from the Marine Laboratory in Aberdeen, to address us on amnesic shellfish poisoning.

Dr John Davies (Marine Laboratory, Aberdeen): I was asked to outline the background to the problem in 10 minutes. You will know that, periodically, bivalve shellfish such as scallops and mussels become toxic to humans. That is because they feed on microscopic algae that are toxic from time to time. The toxin does not harm the shellfish, but is harmful to mammals and birds that eat the shellfish.

The toxins are natural. You will know that some plants in your gardens, such as daffodils or crocus bulbs, produce toxins. If you eat them, you become very ill. The same is true of plants in the sea. The plants in this case are microscopic algae, phytoplankton. Occasionally, especially in the spring and summer, they grow so quickly that they cause blooms that discolour the water. You will have heard of red tides, which are a huge bloom of algae in the water. Shellfish poisoning is not a new phenomenon: the European explorers of north America were among the first to document it after eating shellfish that were taken from water that was discoloured by phytoplankton.

Around 40 of the thousands of species of phytoplankton are toxic. In Scotland, three toxic species cause problems. The first is Alexandrium, which is associated with paralytic shellfish poisoning. As the name suggests, it is a nerve toxin that can cause paralysis and death.

The second species is dinophysis, which causes diarrhetic shellfish poisoning. That gives people diarrhoea and is less important.

The third species, which we have the problem with at the moment, is the pseudo-nitzschia phytoplankton. It causes amnesic shellfish poisoning, which gives people numbness, nausea and—in high doses—loss of short-term memory. In very high doses, it can kill people.

Shellfish pick up the toxins when they filter the algae out of the water to eat them. We do not find toxic algae in the water all the time. They are toxic in Scotland only during a short season in the spring and summer, hence the old adage that tells us not to eat shellfish unless there is an "r" in the month.

Most of the problems in Scotland concern paralytic shellfish poisoning. For example, last year almost the whole of the Orkney scallop fishery was closed from July until March because of paralytic shellfish poisoning. That is not a new event, either. In 1995, the whole of the east coast of Scotland, from Fair isle right down to Bell rock, was closed to scallop fishing because of paralytic shellfish poisoning. Although this is the first time that we have closed such a big area because of amnesic shellfish poisoning, the toxins and closures are not new.

ASP, the condition that we are concerned with today, was first detected in Scotland in 1996. That is when we first looked for it, as that was when it was included in the European directive that drives the monitoring programme. It was detected in Shetland in 1996 and each year since then it has been detected in small doses on both the west

and east coasts. This year, the situation is different. We do not know why. This year, there has been almost no problem with paralytic shellfish poisoning—which is normally the most troublesome—but there has been a tremendous problem with amnesic shellfish poisoning. The cause is probably a minor climatic change that has made conditions better for one species of bacteria than another, but that is pure supposition on my part.

I do not know whether committee members have copies of the diagrams, but I thought that it would be easier to let them see where the monitoring stations are than to try to describe their positions. We collect samples of both water and shellfish, in which procedure we are greatly helped by environmental health officers and the shellfish farmers. In the summer, they send us samples weekly; in the winter they send us samples fortnightly. We analyse the water samples that are sent to us for the phytoplankton that I have been talking about, and when we see a large number of a particular species that we know causes problems, we step up the monitoring programme. We analyse the shellfish flesh for each of the three toxins that I described. The combination of that information is used to effect closures when necessary.

The offshore sampling process for scallops is slightly different. On the third diagram, committee members can see the huge area round Scotland from which scallops are landed in Scotland. The sampling of that area is carried out partly from our own research cruisers and partly by sampling scallops as they are landed from fishing vessels. The scallops are analysed for each of the three toxins that I described. When there is an event of any size—when the presence of any of those toxins exceeds the limit—we extend that sampling programme. At the inshore sites, we take more samples of different species and try to delineate the area that is involved, so that any closures will be as small as possible. At offshore sites, the same happens: we take samples from a wider area, to try to find the boundaries of the event, so that any closure is only as large as it needs to be.

The test for amnesic shellfish poisoning is a chemical test—it is basically a matter of extracting the flesh of the shellfish that are supplied to us and testing it chemically for the level of toxins. We then compare the levels to standards that are set by the European Union; in fact, they are international standards. For ASP, the standard is 20µg of domoic acid, which is the toxin, per gram of flesh. That standard was set after 1987, when there was a large outbreak of ASP in Canada that killed some people. That level is reasonable, as it was set fairly recently using modern toxicological information and data.

14:15

For paralytic shellfish poisoning, the level is set at 80µg per 100g of flesh. That level was set several decades ago in the USA, where there is a long history of problems with PSP. The expert judgment would be that, if anything, that level is probably on the high side. It is unlikely that, if it was reviewed, it would come down. For the third kind of poisoning, diarrhetic shellfish poisoning, the limit is for none of the toxin to be present.

The levels at which those standards are set are probably reasonable. Our laboratory is the UK reference laboratory for algal toxins within the European Commission area, so we have fairly direct input into decision making on those matters. It is unlikely, however, that we will be able to change the limits.

Finally, members will be aware that the recent problem started in May in scallops from around Skye and that since then, through June and July, the whole of the west coast has been closed. We have been asked why we do not sample more frequently, because that might make it possible for the ban to be lifted more quickly. We have limited resources, as you can imagine, and we decided that it would be better to spread those resources to look more widely to ensure that the areas from which scallops were being taken did not have levels of toxin above the limit.

Our experience and experience in America show that scallops are slow in getting rid of the toxin, particularly when they have high levels of toxin, as the scallops in question had. The levels were anything from five to 10 times the limit, so it is not as if they were just above the limit. We knew that it would take several months for the scallops to get rid of toxin at that level, so we felt that it was better to put our resources into looking more widely, rather than more frequently, at the area that was closed.

The most recent results, from last week, show a drop in toxin levels in the North Minch, and we hope that that continues. However, I am afraid that the South Minch and the Sound of Jura are still above the 20µg limit, so the closure will have to remain in the meantime.

I might refer later to the third diagram that I supplied, if we talk about fish farms and their possible involvement. As it is, I have had my 10 minutes, so I shall rest there.

The Convener: Thank you very much. If members would like any points to be clarified, I will allow them to ask questions.

As there are no questions, I invite Mr John Hermse of the Scallop Dredging Association to address us.

Mr John Hermse (Scallop Dredging Association): I have circulated a document to members of the committee containing the points that I want to make.

Basically, we want compensation for those directly affected who can prove losses. The ban has led to a loss of fishing opportunities, particularly for fishermen in smaller vessels. The length of the ban and the wide area that it covers have made some small vessels and some divers turn to fishing areas in open waters and marginal weather conditions, compromising vessel safety to get income. Fishermen and processors who are directly affected by the ban and who are able to prove losses should be compensated.

Are there any plans to give increased quotas for nephrops and whitefish to those who are dependent on scallop fishing? Increased effort on other species has a knock-on effect on those who traditionally fish for those species. If we renamed fishermen sea farmers, I have no doubt that any request for compensation would be looked on favourably.

Bans such as the one in place because of ASP cause increased effort in other fishing grounds, especially those adjacent to the closed areas. That is another good reason for compensation, otherwise the areas where effort is increased are liable to come under severe pressure.

The public perception of scallops waned in the United Kingdom because of several cases of what I would term irresponsible reporting, which portrayed the ban as being caused by a Frankenstein-type scenario. That led to a drop in demand at home and abroad. The industry has worked extremely hard to maintain public confidence in the product. We ask the Government to help fund an advertising campaign to reassure the public and to help regain those lost markets.

One aspect of the ban that should not be overlooked is the stress and social problems caused by the uncertainty, financial hardship and loss of businesses and jobs as a result of the ban. The Government should be aware of those problems when proposing yet more legislation to add to the myriad regulations that are already in place in the industry.

The extremely high levels of ASP toxin are exacerbated by factors that are as yet unknown, but that are possibly pollution based. It is therefore imperative that urgent action be taken to investigate the causes of the high toxin levels. Research funding should be made available to the Fisheries Research Service to liaise further with marine science authorities in countries such as Canada and the United States, to ensure co-ordinated and cohesive research. Algal bloom toxins are a worldwide problem. Would it be possible for the FRS to make available a marine scientist to study the methods used in other countries to sample, monitor and research the causes of ASP?

Funding is also required to develop and verify the Jellett 10-minute test kit for use on board fishing vessels as part of an early warning system. If the product could be verified, it would greatly reduce the size of closed areas and the time spent monitoring and sampling and would give improved area cover. The prototype field test kit that Jellett Biotek has developed will detect the presence of ASP in less than 10 minutes. Although it will not make the ASP problem go away, it will provide technology for fishermen, scallop farmers and divers to test shellfish, to check whether ASP is present and thus allow them to avoid areas containing contaminated product. Jellett Biotek would be interested in collaborating with the Scottish industry to identify Government funding mechanisms that would assist it financially in completing the development and validation of the test in the United Kingdom.

Our association has been asked to present a paper at an international conference in southern Ireland at the end of this month. There, we hope to come across people who have experienced or are experiencing the problems caused by ASP and other harmful algal bloom toxins and discuss how they have coped with those problems from a practical point of view.

We want co-ordination of end-product testing for processors so that results can be pooled for everyone's benefit. The Scallop Dredging Association has agreed with its members that a co-ordinated approach to end-product testing, as suggested by the Scottish Executive rural affairs department's food safety unit at a meeting on 6 August, is in the scallop industry's interests. We will now revert to the food safety unit to discuss the modus operandi of such a system.

There should be more co-operation with the Fisheries Research Service to obtain samples from as wide an area as possible so that there is almost maximum necessary coverage. Furthermore, our members have agreed to co-operate with FRS to supply samples from as wide an area as possible along with accurate location information.

We also want to ask FRS and SERAD about the level of sampling in other EU countries. Is there an EU-wide level playing field on this problem? Are imports subject to EU directive 91/492? Rumours have been circulating that other EU and UK countries are not quite as diligent about testing as we are in Scotland. Will the Government assure the industry that the testing procedures are followed as assiduously in other countries, that

there are no differentials and that the areas of closure, in view of their immense size, are necessary, without compromising consumer safety?

After taking advice from the FRS, does the Government think that toxin levels on the west coast were ever as high, prior to sampling, as they are now? If so, why were there no reported cases of illness from the area?

We need a freedom of information approach from the FRS and other Government agencies about the possible causes of the high level of toxins. There have been suggestions of cover-ups by Government-run scientific institutions such as FRS about the causes of toxins such as ASP. Will the Government further assure the industry that all known information on the causes and exacerbation of toxins will be released to the industry?

The Convener: Thank you. I do not think that any clarification is required about the issues raised by Mr Hermse.

We will move on to Mr John MacAlister of the Scottish Fishermen's Federation.

Mr John MacAlister (Scottish Fishermen's Federation): There are eight main issues that we want to raise for consideration. My first point concerns general principles. The federation is anxious to ensure consumer safety and confidence in all shellfish products of Scotland's sea fisheries. In the market place, Scottish scallops have a deservedly high reputation which the federation wishes to preserve and enhance. For all those reasons, the federation is more than willing to co-operate and comply with scientific assessment and, where necessary, with closure programmes occasioned by the incidence of any form of toxicity in the scallop stock.

My next point is about monitoring. Fisheries extend to the majority of the country's coastline. Members will appreciate that the scale of the monitoring task is extensive, as it includes the mainland and the islands. That is why more resources must be made available. The Scottish Fishermen's Federation seeks assurances on that point for the reasons that we have set out and reassurance that the scientific services have adequate resources for monitoring fishing.

14:30

I would now like to touch on the issue of testing for the amnesic shellfish poisoning toxin. Testing has been carried out only for the past two years and it is still being developed. We feel that there is a great need for it to be developed.

It is important to ensure that international best practice is being implemented by the scientific service. It is also essential that test results are evaluated and published with the minimum delay. We have had to wait long periods for results, and no fishing operation or fish processor can conduct its business if it does not know what the situation is.

Test results must be published without delay—there have been examples of test results being published 14 days after the samples have been taken. There will clearly be a risk to consumers and damage to products' reputations if fisheries remain open when the toxin is present at dangerous levels. It is important to reassure the public and the fishermen that resources are available to allow a response to the risks within a reasonable time.

The next point is about closure policy. Some care must be taken to ensure that wider conservation measures are not compromised when closure orders are made. Fishermen will, of course, leave a closed area and direct their fishing effort elsewhere while the closure remains in place. It would, nevertheless, be unacceptable if significant areas remained closed after the stock had been tested and declared free of toxins.

We feel that great caution should be taken when only one small area is open. The fishing activity that goes on in that area from a large fleet of vessels can cause damage. We have learned from scientific reports and our experience of paralytic shellfish poisoning in the North sea. It is vital that we establish who can make the decision officially to reopen a fishery and the bases on which that decision will be made. The policy must be developed in conjunction with the industry.

I would now like to say something about diversion of effort. A significant proportion of scallop fishermen have appropriate licences and equipment to pursue other species. However, others do not have such flexibility. While there can be no question of licence relaxation, it would seem appropriate that scientists should give priority to dedicated scallop vessels in awarding charters for monitoring programmes.

Although existing European regulations do not foresee the payment of compensation for loss of earnings in current circumstances, from the draft regulation for financial support for the fishing industry that is due to be implemented at the beginning of next year, it would appear that such payments are being considered. Consideration should be given to making payments in cases of genuine hardship. Apart from giving fishermen parity with other primary production industries, relief would ensure an even greater commitment to managing toxicity problems in the shellfish industry.

Technical conservation and effort limitation

measures, which would control pressure on stocks, are being examined and will be set out in the consultation paper that the Government will present to the industry this month. It is important that the measures should have regard to the disruption to the fishery caused by the outbreak and the economic effects of any future similar problems, bearing in mind the nature of the causes. We should be careful about how we proceed with the conservation and technical measures that will appear in the consultation paper. It must be borne in mind that when areas are closed, difficulties will arise.

Amnesic shellfish poisoning is a naturally occurring toxin and must have been present in stocks before the current testing policy was implemented. That raises the question: how long has ASP been present without being detected? No ill health has so far resulted from eating scallops in the UK. Very little is known or has been communicated to fishermen about how, where and when ASP occurs.

The extent of the current outbreak is alarming, and fishermen are anxious to ensure that a major research programme is undertaken to establish how outbreaks can be foreseen. The fishermen have great doubts about the current research, and it is important that it should be questioned. We need to consider, for example, how much time has elapsed between the samples being taken from the water and the results being presented to the public.

That is all that I would like to say. Thank you.

The Convener: Thank you. Would members like anything that Mr MacAlister has said clarified?

Alasdair Morgan (Galloway and Upper Nithsdale) (SNP): Mr MacAlister, you said that you have doubts about the nature of the research and went on to talk about the time scale. Are you questioning only the time scale or something more fundamental about the research?

Mr MacAlister: There are two points—the time scale and the nature of the research. We feel that the research needs to be examined more carefully.

Mr Mike Rumbles (West Aberdeenshire and Kincardine) (LD): Are you questioning the need for this ban?

Mr MacAlister: No, we are not questioning the need for the ban; we fully understand the need for the ban. We are questioning the research and the way in which it is done.

Alasdair Morgan: If we are going to go down this line of argument, perhaps we should go a bit further. Can you be a bit more specific? Either the results of the research are valid or they are not valid.

Mr MacAlister: I am totally happy with the results of the sampling. However, we in the industry have questions. Are the results 100 per cent accurate? What about the period of time between when the sample is taken and the time that it is given out to the public. Mr Hermse made the point that sampling results can be presented within a very short period—as little as 10 or 15 minutes. I feel that there is an onus there for more research to be done.

Dr Elaine Murray (Dumfries) (Lab): You are not questioning the methodology, but you are worried about the length of time before results are available and the accuracy of those results?

Mr MacAlister: That is correct.

The Convener: We will now move on to Mr Doug McLeod, of the Association of Scottish Shellfish Growers.

Mr Doug McLeod (Association of Scottish Shellfish Growers): I shall not repeat the points that I have already made in two submissions to the committee—I assume that they have been read with great interest by members. Within my 10 minutes, I shall try to expand on certain issues. However, the one thing that I would like to repeat is that, in all these biotoxin events, my members put the safeguarding of public health at the top of our list of priorities.

I would like to expand on the specific nature of shellfish cultivation. Although we are generally referred to as shellfish farmers, we are very distinct from salmon farmers. Whereas—using terrestrial terms—salmon farming is akin to intensive livestock farming, shellfish farmers are very much at the mercy of nature. We cannot feed our stock and we do not hold them in unnatural conditions. We merely keep them in an organised way so that they can filter feed naturally in the water. As Dr Davies said, that is when they can accumulate toxins. We cannot affect that. We rely on the productivity and high ecological quality of the sea. Shellfish are, in a way, the victims. They are at the end of the food chain, so anybody who has an effect on the marine environment has an effect on shellfish.

We are also very different from the fishing sector. I agree with many of the points that my fishing sector colleagues have raised this afternoon, but we are a different animal. We have different problems and I believe that it is essential that this committee recognises that and tries to ensure that the Scottish Executive provides different solutions. We are culture versus capture. We are premium quality and limited volume versus the more commodity-based approach and the high volume that characterise the dredging sector. We are certainty versus variability.

One of the attractions of cultivation to the

customer is that we can guarantee what the supply will be because we are aware of our stock. We do not have the uncertainty that faces the capture sector.

Those different characteristics mean that there are different solutions to the common problem that we face. As I pointed out in my second submission, this event is distinct from any other west coast experience in past years. The issues are different and their resolution will be different. The Food and Environment Protection Act 1985 closure orders are undoubtedly a blunt instrument that may well be appropriate for the fishery sector, but they are inappropriate for the cultivation sector. That is shown by the fact that in earlier years when paralytic shellfish poisoning and diarrhetic shellfish poisoning outbreaks took place, closures of farms were generally carried out on a voluntary agreement—they were organised between the department and the individual farmers. It was recognised that the imposition of FEPA orders were over the top.

Orders were imposed this year because of the scale of the problem—the 8,000 square miles mentioned in the press. Raising the closures is the problem. We do not mind closing farms when there is ASP poisoning, but we believe that when it has gone the constraints should be removed as swiftly as possible. That is difficult under a FEPA closure order. Continuous monitoring is possible; we ought to ensure that when farms satisfy the agreed criteria of two clear samples or two samples below the action level, they are relieved of the marketing constraint. That should apply for the ASP outbreak as it has in the past for PSP and DSP. It was reasonably simple to do it with voluntary closure, but it is very difficult under a FEPA closure order. We need to improve the way such closures are put in place.

In addition to a more flexible and appropriate approach to implementing biotoxin control measures for shellfish farms, as my colleagues have said, there is a need for more research to clarify the questions that I have listed in my submission. They include: the trigger mechanisms, why it has been limited to scallops, why such a large area and why for such a long time, and what influence anthropogenic discharges have had on the development of stress for the phytoplankton and the diatoms that create the domoic acid.

I do not point the finger at salmon farming, but I raise that as an issue that I know is of concern in the west coast fishing communities. There should be research to show whether salmon farmers are responsible for an increase in stress to the ecosystem. Until there is a clean bill of health, there will be a suspicion that, at the margin, salmon farming is contributing.

If there are more flexible and appropriate regulatory measures and more research, shellfish farming, and scallop farming in particular, can look forward to very significant growth and can contribute significantly to the economy of west coast communities. Without such support, two decades of public and private sector investment and Government-supported research and development will be put at risk.

14:45

Derogation from FEPA constraints on moving juvenile scallops is also critically important. We must have that derogation because moving juveniles is the future of the industry. It has no impact on the food chain and no impact on human health, but while we are prevented by clumsily written legislation from moving stock from one area to another the industry's prospects are put at risk unnecessarily.

Scallop farmers have suffered a summer of economic emergency. In the past 48 hours, the Government has recognised the plight of the hill farmers. We believe that the difficulties suffered by the crofters of the seas should be recognised as well, whether through compensation for the destruction of their cash flow over their major season or, as a minimum, by recognising that if this happens in the future, costs will be involved in restructuring the industry so that it focuses on the Christmas market, for example, rather than supplies scallops for the summer season.

New supplies of fish and shellfish are generally forecast to be produced largely from aquaculture. That is the future and we wish to ensure that Scottish shellfish contributes to that future.

Alasdair Morgan: In previous outbreaks of PSP and DSP, under the voluntary system, after two clear tests, closure orders could be lifted farm by farm. Are you saying that if that regime was in place now there are farms that would be back in production?

Mr McLeod: Yes. When I raised that point a couple of months ago, it was hypothetical and I was looking forward to when the outbreak of ASP would begin to end; when the tide would start to withdraw to the deeps of the Minches. I believe that that is now happening.

You will notice that the first page of results from last week's samples are mostly in double figures below the action level—18, 15, or something like that—although a couple are above the action level. They are very different from the fishing results on the second page, which are still up in the hundreds. It is essential that it should be recognised that fishing and aquaculture have different environments. The effort of this whole summer has been dealt with from the fisheries point of view.

Aquaculture was not mentioned once in the minutes of the meeting at which you discussed amnesic shellfish poisoning. I see that there is an official present from the fisheries section of the Scottish Executive rural affairs department, but there is nobody from the aquaculture section. We are the invisible participant at the banquet. We must be recognised, as we have problems that are different from those of the fishing sector.

The Convener: Thank you Mr McLeod. We will move on to Mr Bob Stubbs of Highlands and Islands Enterprise.

Mr Bob Stubbs (Highlands and Islands Enterprise): I thank you for inviting Highlands and Islands Enterprise to give evidence to the committee.

It is obviously difficult at this stage to provide concrete evidence of the economic impact of this ban, as we are in the middle of a process and the full effects have yet to come out into the open. However, in the past week or so we have undertaken consultation widely within the industry, and have drawn together the available evidence.

We have estimated that number of people employed in scallop fishing is 357. You will see on the handout that landings by value are just over £8 million, which is a significant share of overall landing value. We reckon that the number of scallop-fishing jobs represents about 10 per cent of direct fish-catching jobs in the Highlands and Islands.

The landing value of scallop fishing as a percentage of total landing value can vary—it is as high as 22 per cent in Campbeltown. In some areas, scallop fishing is regionally significant in terms of landings. Campbeltown, Oban and Mallaig are the key landing ports for those areas.

Based on our sample of respondents, we have found that vessels involved in scallop fishing have been grossing between £200,000 and £400,000 per annum, and have generally employed between three and four crew members. As has been said, few vessels have tied up so far, but some have had to go elsewhere to fish—to the Clyde, or as far south as Cornwall. West coast vessels generally seem to be staying on the west coast rather than going to the North sea, although that is less so for Mallaig-based boats.

The exception is the Western Isles, where we are aware of four vessels that are undertaking no work. The total loss of income is estimated to be about £50,000 per month—it is starting to reach significant levels. Seasonal closure in the Uists and Barra runs until 1 November, I think, so that even if the ban were lifted today, the grounds in the southern islands would not be immediately accessible.

As has been said, the profitability of vessels has declined because of the need to travel to different areas, which results in extra costs in fuel and in crew travel time, less familiarity with waters, and pressure on volumes as other people fish the same grounds.

I echo many of the points that Doug made about aquaculture. The point about aquaculture is that producers do not have the option to fish for something else. Geographically, the impact is focused on many of the producers around Skye.

We have identified about 23 jobs in scallop diving between Skye and Mallaig. Some of those people have turned to alternative species, such as razor fish. However, others have experienced a loss of turnover, despite the fact that dived scallops normally attract a price premium in the marketplace.

We have consulted about 14 fish processors in the area and found that the impact of the ban is variable. Three companies have shed staff, reduced hours or lost staff as a result of the ban. There is concern about the loss of skilled staff, who might be difficult to get back once the ban has been lifted. Three other businesses are forecasting job losses by the end of September or early October. We have identified a total of about 20 jobs so far. That might not sound significant but, in a remote area in the Western Isles, for example, three or four jobs are important.

Dependency on scallops varies. Some people make occasional sales to the local retail and catering sector, whereas some of the businesses that we interviewed have a 95 per cent dependency. Some of the more dependent processors rely on supplies from the ports with the higher percentage of landings, to which I referred earlier.

There are hot spots in the remote parts of the west coast where the impact of the ban has been significant. Processors there have difficulties in sourcing scallops from elsewhere. Transport costs are a main factor in that. It is also difficult to establish new buying networks. The impact seems to be hardest where the processing sites are independent and remote, such as on Mull, on Skye and in the Western Isles.

Another factor is the time and cost of developing other avenues, such as prawn processing, coupled with the uncertainty about when the ban will be lifted. That is seen as a constraint by some of the processors. The loss of sales is likely to have a significant impact as a net loss to Scotland plc, as it were, because most of the market for scallops is outside Scotland. We were concerned to find that, among larger multiple retailers, sales of other shellfish species are being lost—that is the halo effect of other disease outbreaks.

Multiples try to maintain due diligence where best they can and think that the problems may spread into other shellfish. The multiples do not understand the issues but want to be ultra-cautious.

15:00

On the wider strategic issues, the concern is that the scale of losses will increase if the ban stays in place; scallop processors will be increasingly affected and pressure will be placed on the nephrops quota. There could also be long-term loss of activity, with fishermen, processors and—more important—customers withdrawing from the scallop sector. There is very little confidence and re-entry into markets is a concern. There seems to be more confidence where markets are local and personal contacts are well established but, as I mentioned, the multiples could be a long-term problem.

So far, the impact on transport companies appears to be relatively slight. However, the impact is likely to be greater where the processors also do third-party haulage, taking back loads or empty loads into remote locations. If they are not getting product out, the economics of transport in remote island communities becomes an issue.

The Convener: Thank you very much. If no clarification is required, we will move directly to hear from Mr Neil Fleming of the rural affairs department.

Mr Neil Fleming (Scottish Executive Rural Affairs Department): At present, the Scottish Executive administers 214 over-10-metre vessels that are licensed to fish for scallops by mechanical dredge in addition to other species appropriate to the terms of their licence. All vessels of 10 m or less may fish for scallops. The value of scallops and queen scallops landed into Scotland by UK vessels in 1998 was around £17 million.

I have circulated to the committee a couple of graphs and a table, which give a wider overview of the value of the scallop-fishing industry in Scotland over a period of 18 months prior to the ban coming into force.

On graph 1, the top line shows the total value of scallop landings, with monthly values varying between £1 million and £1.8 million. The average value of a tonne of scallops is between £1,500 and £1,700. That total value figure is made up of the value of scallops from the ban area and from all other areas. A key point to make here is that the fishery is year round. The periods January to March and October to December inclusive represented almost £4 million of the £7.6 million of west coast scallops landed—that is more than 50 per cent.

Graph 2 shows that, in the first half of the year—before the ban—returns from outwith the area were consistently higher than average and those from within the affected area were lower. The latter may be due to the good prawn fishing that was a feature of the first half of the year. The value of prawns landed in the first seven months of the year by vessels with an entitlement to scallop dredge was up by 18 per cent compared with the same period in 1998. That reflects what representatives of the industry have been saying about scallopers going into other fisheries. If there are alternative target species, obviously scallop fishermen will switch to them.

Table 1 shows that the total value of scallop landings was around £4 million or £5 million per quarter, but that in the quarter before the ban, the landings from within the ban area comprised only about 30 per cent of the total. The ban area is clearly important for local boats, but the scallop fishery, as well as being year round, also has a large geographical spread beyond the ban area. Again, that reiterates what Dr Davies said.

In the short term, the overall effect of the ban has been reduced by two main factors: the ability of many fishermen to switch to other fisheries, notably prawn fishing, and their ability to go further afield. The impact on fishermen is felt most by those who are the most specialised in terms of gear and by those who cannot go further afield. A large area has been affected by the ban, but the scallop grounds around Scotland's coasts are very extensive.

On the processing side, our information accords closely with what we have just heard from Highlands and Islands Enterprise. Many processors have moved into other lines, such as prawn processing and packing, but that, too, is coming under pressure because of recent poor prawn fishing. Larger processors have found it possible to get supplies, but some smaller ones have found it more difficult both to get supplies and to change patterns in their factories.

Independent west coast processors have been hit hardest, especially in the Western Isles, where there have been lay-offs of both full-time and part-time staff. For example, small operators in the Uists have had great difficulty in finding supplies, resulting in lay-offs of the casual workers who are often brought on to the lines at this time of year for scallops.

In terms of management measures, with the mixed nature of the west coast fisheries, movement out of scallops and into other shellfish will have implications—on west coast nephrops quotas, for example. Our quota managers are monitoring that situation.

We have had a request to open areas that are,

under the Inshore Fishing (Scotland) Act 1984, closed to scallop fishing seasonally. However, the continued high levels of ASP have overtaken that request in the short term. We also have to consider such requests against the possible impact on other sectors of the industry.

The information that the department has on the impact on the industry accords closely with what we have heard both from the industry and from Highlands and Islands Enterprise. The biggest general medium-term concern has been the retention of markets.

The Convener: I propose that we progress to questioning. I shall allow lines of questioning to be pursued by individual committee members, and questions can be put to any member of the panel.

Alasdair Morgan: I would like to ask about international comparisons. In the first presentation, we heard that these algal blooms date back several centuries, if not further. We also heard that the problem with ASP is relatively new, in comparison with the other kinds of poisoning. If the problem is not restricted to Scotland, how much can we learn from other countries? If something can be learnt from other countries, where the experience is similar or different, there is no point in our trying simply to reinvent the wheel. What do people's experience of the problem lead them to think?

Mr Hermse: I have undertaken an intensive study, through the internet and other media, into the problems in other countries. As a result of that research, our association has been asked to present a paper on the practicalities of dealing with ASP at the third international conference on shellfish restoration, which will take place in Ireland. We hope to glean more information about the research that has been done then.

A prototype data management system has been set up in the Gulf of Mexico, and a similar initiative might stand this country in good stead. Other initiatives that we could use are being implemented in other countries. I am concerned that the Fisheries Research Services agency is slightly underfunded for what it has to do at the moment. It needs further funding to continue its research.

Dr Davies: I return to the original question. ASP was identified as a particular toxin only after 1987, when there was a large toxic event in Canada and people did not know the cause. Research that was carried out after that event identified the substance domoic acid, which is now labelled as the ASP toxin. It took time but, in 1997, the EU directives on shellfish hygiene and toxin levels made monitoring mandatory. We jumped the gun a bit and started test monitoring for domoic acid in 1996, which is why I said that we first found it in that year. It had undoubtedly been there before that, but had never been measured.

Doug McLeod touched on why, previously, people had not been ill through eating scallops. Most people eat the muscle from the scallops and probably not the gonad. The muscle has almost no toxin in it; the toxin is in other bits of the scallop. Unfortunately, the EU directive is written in such a way that what must be taken into account is whether any edible parts of the scallop contain toxin. That may be why people have not suffered in the past, because most people eat only the muscle. I do not know whether my colleagues agree with that.

Alasdair Morgan: I want to pursue the international comparison. When there are similar situations abroad—bearing in mind that there are obvious differences in current—are the affected areas as big and are the bans lifted as quickly? Are there any valid comparisons that can be made with other countries?

Mr MacAlister: One point that I would like to raise in relation to other countries is that it is only this month that the European Commission announced that it was sending an option to the French over their failure to observe two directives on water quality. The action represents a second stage of infringement under the Shellfish Waters Directive (79/923 EEC). We raise the question: is the same form of regulation being applied in the UK as in other parts of Europe?

Mr John Munro (Ross, Skye and Inverness West) (LD): Does that information come from the industry itself? We do not know the answer to the question, but you should.

Mr MacAlister: No, I do not know the answer to the question. The European Commission has raised the question, so there is information in Europe that would supply an answer, but I do not have it at hand.

The Convener: Is there anyone who can comment specifically on that—Dr Davies?

Dr Davies: I do not know the answer to your question, but I do know that earlier this year we had a visit from the EU in which it audited our monitoring programme for algal toxins. I am pleased to say that we came through with flying colours. Presumably, the EU also audits other EU countries, although I do not know the outcome of those audits.

Mr Rumbles: I was impressed by Mr McLeod's contribution. Reading through the submission, I am interested to know whether he feels that the EU regulations are being misinterpreted. The submission talks about the ban on scallop fishing, not harvesting, which is perhaps the point that you are making. I am a little unclear. Are you saying

that we are being too officious in our interpretation of the EU directive?

Mr McLeod: It is a fine line to walk. Along with my colleagues, I believe that it is essential to safeguard consumer health. I am not yet convinced that the sampling and test analysis that we carry out in the UK is on a par with that of our European colleagues. There is probably a case for saying that those procedures are stricter in the UK than elsewhere. Given, as we have pointed out, that we have not had any problems with ASP before, we are perhaps over-egging the pudding. We are unnecessarily penalising our industry.

15:15

My submission is that, in view of that feeling, we should be able to lift the constraints, where possible, as quickly as possible. Yet, despite the fact that, as I said before, the desk instructions on ASP and DSP from the ministry in England and Wales and north of the border state that the constraint should be lifted once two clear samples—or two samples that are below the action level—have been detected, the Scottish Executive has consistently refused to give me written assurance that those rules apply for ASP. Twice, I have been assured verbally that that is the case. Both times I have been told that I would be sent an assurance in writing, but still I have not got it. Now, a second arm of the Scottish Executive has said that it will only lift the ban in its entirety. In other words, it does not matter if farms are free of the toxins—as long as there is ASP in samples from the north Minch, the blanket ban will stay.

That is what I mean when I say that the FEPA closure order is a blunt instrument that is interpreted in different fashions within the Scottish Executive. I look to this committee to resolve the matter. I would hope that that could happen in a way that is positive for the shellfish farming sector, but in any case the situation needs to be clarified, as there is confusion.

The confusing signals come not only from the Scottish Executive—this is a new field and we are all still learning—but are being given at UK level. For example, the first item of research on human health aspects in the Ministry of Agriculture, Fisheries and Food's review of fish and shellfish cultivation and health, completed this winter, mentions that research on toxic blooms could help establish their pattern of development, including their origin. That is what we need to know. Where is the stuff coming from? Why is it suddenly appearing? That is why, in my submission, I said that the Scottish Executive spokesperson who said that no more research would be done because we know where the toxins are coming from and what sets this problem off is incorrect.

Dr Murray: I am interested in the suggestion that some people feel that research should be done independently rather than by FRS. The Scallop Dredging Association document suggests that the causes of the toxins may have been covered up by Government scientific institutions. Why would that be? Where does that suspicion come from? What would motivate a scientific institution to cover up what it knows about the causes of toxicity?

Mr Hermse: Several bodies have suggested that FRS, as a Government institution, is told which information to give out and which not to give out, possibly to protect those who are causing the pollution that may exacerbate the production of toxins in algal blooms. We want to stop the rumours by saying that all information about the problem should be in the public domain and available to the industry. As for where the rumours come from, they come from interested parties within the industry.

Dr Murray: How did FRS respond to the rumours?

Dr Davies: We responded with some difficulty. I can say categorically that nothing is being held back. If Mr Hermse is alluding to the question of whether fish farms are involved in causing algal blooms the answer is that we do not know, which is why we have not made any definitive statements. In the current case, where the algal bloom covers pretty well the whole of the west coast of Scotland, we have examined the nutrients coming out of fish farms, because the theory is that nitrogen nutrients are excreted from fish farms in large quantities. There is no doubt about that. Nitrogen limits the growth of algae. Two of the toxins contain nitrogen, so there is a plausible link.

When we examine the water flowing up the west coast of Scotland—which is made up of Atlantic water and water flowing out of the Irish sea—we see that it flows very slowly up the coast. Tidal excursion pumps it into and out of sea lochs and the water from the sea lochs is exchanged—usually in two or three days—with water from the main body of water that flows up through the Minches.

The amount of nitrogen that is produced by all the fish farms adds something like 1 per cent to the natural amount of nitrogen in the water flowing up the west coast of Scotland. It is difficult to see how that amount could make a significant difference. In this instance it is unlikely that fish farmers have been a contributory factor.

We have had ASP outbreaks on the east coast of Scotland as frequently as on the west coast, but there are no fish farms on the east coast.

The Canadians experienced a big outbreak in 1987. They also have fish farms. They looked at

the levels of ASP close to fish farms and the levels in areas away from fish farms and they found that there was no association of high levels of ASP with fish farms.

All the evidence is circumstantial and the balance of the circumstantial evidence does not suggest to me that fish farms are responsible. One cannot, however, give absolutes in this area. I agree with my colleagues from the shellfishing industry and growers that this is an area in which more research should be done.

Mr MacAlister: There is an element of doubt about fish farming. I take what Dr Davies says on board. We have called loudly for that to be cleared up. We must have a starting point, but I feel that everybody from the commercial side of the industry to the shellfish farmers has doubts.

We need research now to clear up the speculation that is going on in the industry. We have heard from all sources here today that we must remove the speculation and doubt that has been transferred to the consumer.

We must start by clearing the fin fish farms and get out in the open the point that they do not affect the situation.

Dr Murray: How easy would it be to prove that?

Dr Davies: It would not be at all easy. We have considered approaches to the problem. I think that the approach that we would use would be to employ numerical models that reconstruct water movements along the west coast of Scotland. We would introduce the levels of nitrogen from fish farms to the models and examine the impact that that would have on the dynamics of phytoplankton. That is not a trivial task, but it can be done, although not in a short time.

Richard Lochhead (North-East Scotland) (SNP): While we are discussing research and concerns regarding levels of research, I would like to ask John Davies if he is satisfied that there are enough resources to research ASP adequately. Can he further confirm whether the Scottish Executive has—in light of the current crisis—injected any extra resources into addressing the problem? If not, has Dr Davies or his department sought any extra resources for additional research and what was the response?

Dr Davies: We must make a clear distinction between research and monitoring. A lot of extra money has been spent this year on monitoring the problem. That was not new money, so spending it has resulted in other programmes that we have been carrying out being slowed down. Resources have been switched to this problem. The money has gone towards monitoring and dealing with the problem on the ground. Research is different.

Because we have never had a big ASP outbreak before, the research will come after the event. We plan to carry out a programme aimed not just at ASP, but at algal blooms and toxins in general as they are a problem for the shellfish industry. We are part of a worldwide consortium of researchers in this area. The problem is worldwide and is so huge that it would be unrealistic to think that our institute alone can solve it. We will get to the bottom of the problem only by continuing to be part of such an international consortium of scientists.

Richard Lochhead: It would make sense to have a quicker turnaround period for samplings from Scottish waters. However, your institute has to deal with the rest of the UK at the same time, which must have a bearing on your resources. Have any extra resources been allocated to deal with Scottish samplings?

Dr Davies: We have a contract to do the monitoring in England and Wales, which is paid for by the Ministry of Agriculture, Fisheries and Food and is separate from our contract with the rural affairs department. An institute such as the FRS has always worked on the principle that when an event such as this or such as the Braer disaster occurs, we switch resources from research programmes into monitoring programmes, which means that research programmes progress more slowly. The department does not come up with new money, but it accepts that some of the research being done for it will slow down as we switch resources.

Richard Lochhead: I do not want to hog the discussion, but I want to raise another point. The evidence that was given by your colleague to the Health and Community Care Committee suggested that the institute has a rota for the turnaround of samples received from the whole of the UK. However, if a ban is in operation in Scotland and is affecting people's livelihoods, should not Scottish samplings receive priority? Is the FRS constrained by its resources to deal adequately with the affected area in Scotland?

Dr Davies: Samples are treated on a rota, as you would expect. We cannot stop our obligation to MAFF to monitor areas in England and Wales if there is a crisis in Scotland. We try to keep all the balls in the air—with great difficulty. The number of samples we can do is limited by people and equipment. Organisations such as ours are geared to deal with the norm, not with emergencies. We try to shift as many resources as possible to deal with an emergency of this kind—often from the research areas—and that is what we have done in this case.

15:30

Alasdair Morgan: Is your monitoring

constrained? You said earlier that you are concentrating on investigating areas that are still open, which implies that you are not doing so much monitoring in the areas that are closed. If you had more resources to put into monitoring, would it be possible to lift the order in parts of the area sooner?

Dr Davies: It would not, and events have borne that out. As I said, experience here and abroad has shown that scallops are slow to get rid of these toxins. The affected areas have been closed for more than three months. Our monitoring them more frequently would make no difference to when they can be opened. Based on our knowledge of scallops' slow depuration rates and the fact that the toxin levels were reasonably high, we were able to estimate that it would be some time before the areas could be opened. I do not think that by putting our resources into examining a wider area we have delayed the opening of the areas that are currently closed.

Mr Rumbles: Have I misinterpreted this, or are you disagreeing with Mr McLeod? You are saying that you do not envisage the ban's being lifted in those areas, whereas he seemed to be saying the exact opposite.

Dr Davies: I thought that Mr McLeod was asking why, given that some of the scallop farmers have evidence that their scallops have been below the toxin limit for two consecutive sampling periods, the ban was not being lifted. Is that correct?

Mr McLeod *indicated agreement.*

Dr Davies: My colleague Godfrey Howard, who runs the sampling programme, has written me a note to say that no scallops from aquaculture sites have met the criteria for opening. I do not know whether we can resolve this here, but clearly there has been a misunderstanding.

Mr Rumbles: I simply wanted the difference of view clarified.

Rhoda Grant (Highlands and Islands) (Lab): I want to ask about the test that the Scallop Dredging Association mentions in its submission, which gives results in 10 minutes. If local fishermen were to use that test, would that provide your organisation with more specific findings and make it possible to cut down the large blanket areas to which the ban extends?

Dr Davies: We have been involved for the past couple of years in validating the test to which the association refers. The test kit is made by a company in Canada and is based on an assay that a member of our staff developed several years ago. We are interested in introducing a commercial kit of this kind for two reasons: first, it would provide much quicker results; secondly, it would obviate the need for the mouse bioassay, which is the current test. However, we have run a series of tests on the Canadian kit for two years and it is not reliable enough at the moment. We are helping the manufacturers to overcome the problems, but until the kit is reliable we cannot sanction its use in place of the current tests.

Rhoda Grant: Is your research priority to examine the causes of amnesic shellfish poisoning or to develop a better testing system?

Dr Davies: We have conducted a lot of research in both areas in the past few years. We are trying to develop new test methods. A member of our staff did the basic work on which the Canadian kit is based: people in Canada have tried to make it commercial. We also have another test for diuretic shellfish poisoning, on which we are running trials against the accepted EU tests. We would like to get away from using mouse bioassay tests and move towards using biochemical tests. We want to find methods that are quicker. A biochemical test can be automated, which saves time.

Lewis Macdonald (Aberdeen Central) (Lab): I would like to follow up that angle. In your presentation, you talked about the climatic element in the phenomenon. When I visited the Marine Laboratory in the summer, one of your colleagues explained to me that part of the cause might be that the water movement off the west coast was less than usual because of the kind of summer we had had. The water movement must have some bearing on the effect on the matter of the fin fish farming that you were talking about.

How much of our theories on the situation and the causes is inspired guesswork and how much is based on evidence?

Dr Davies: I think that my colleague would not have said that the movement of water up the west coast was less. I think that he was probably referring to the outflow from the Greenland sea. As far as we know, the movement of water up the west coast is pretty much the same as ever. We know that, in the winter—which includes March and April, for our purposes—sea water is four degrees warmer now than it was six years ago. The temperature of the water on the west coast is equivalent to that off the south-west of Ireland. The temperature could change again—it might go back to its previous level—but it is possible that a change such as that would bring about changes in algal growth.

We are speculating. I was careful to say that linking the problem to climate change—local, short-term change, not global—is speculative.

Lewis Macdonald: That is interesting. It confirms my suspicion that an awful lot still has to be established.

I would like to ask Mr Fleming what his and his

department's view is of the research requirement in the area. How does the department think research into the causes of algal blooms should be taken forward?

Mr Fleming: A fair amount of money is already being spent. As Dr Davies said, a lot of time and effort has been spent on the problem this year.

The Convener: I am being told that people cannot hear you.

Mr Fleming: I am sorry. The problem has been a priority for the Fisheries Research Service. Dr Davies has explained how that works in relation to their overall resources.

I understand that discussions will take place this week between the department and the FRS on the implications of research for their budget and on where money would come from to pay for it. I cannot say more than that as I know no more.

Lewis MacDonald: Dr Davies made a distinction between the monitoring costs, which have been higher because of the crisis in the industry this summer, and the research. You mentioned that the problem has been a priority this summer but, unless I misunderstood Dr Davies, he was saying that monitoring had been the priority. I am thinking more about the research that needs to be done if we are to get to the root of the problem. Is that covered by this week's budget discussions?

Mr Fleming: I believe that it is.

Irene McGugan (North-East Scotland) (SNP): May I come in at this point?

The Convener: It is all go now. Is your point on a related issue?

Irene McGugan: It is on a budgetary issue. I want to come at this from a different angle: is any consideration being given to compensation for those affected by the ban?

Mr Fleming: It has never been the policy of Governments to compensate producers for losses that are a consequence of natural events. ASP, PSP and DSP occur naturally and have been known about for many years. Providing compensation would cause practical difficulties. The industry has raised the issue of compensation but, as I say, it has never been our practice. We may have to consider it, but that would be for ministers to do alongside their other priorities.

Irene McGugan: The industry might dispute your view on whether the Government is competent to give compensation in such cases. What about other areas in which assistance might be given? For example, people could be re-equipped to allow them to fish other species or the scallop season could be extended once the ban is lifted. Those measures would help people to recoup some income.

Mr Fleming: Measures such as extending the season under the Inshore Fisheries (Scotland) Act 1984 have to be considered against the overall biology of the fisheries involved and against the lack of a welcome that changes might receive from other sectors in the industry. There is always a knock-on effect. The Scottish Fishermen's Federation did not suggest licence changes. The possibility of offering support in other ways is a new item on the agenda and will be considered against other priorities.

Richard Lochhead: What are the roots of the Executive's policy on compensation? Whose policy is it? Has it been inherited and, if so, when was it first established? How does the policy relate to the £9 million that was awarded in compensation to salmon farmers? I am not an expert on this—perhaps John Davies can contribute here—but why would there be compensation for ISA but not for ASP?

The Convener: We may well be straying into areas of policy that are outwith Mr Fleming's area of responsibility.

Alasdair Morgan: We heard that it was not policy to give compensation for natural events. Is ISA natural or artificial?

Rhoda Grant: I would like to take a different line and agree with Mr Fleming. We should not move the problem on to another area by opening other fisheries. We would only have to deal with the problem again.

I want to know how we should interpret the European Union directive. Can we interpret it in a way that would allow Mr McLeod to move his scallops around rather than harvest them? Can we interpret it in a way that would allow people to harvest scallops but to dispose of the parts that were poisonous?

15:45

Mr Fleming: On the second point, I understand that the directive does not allow for differentiation between the different parts, so that option does not exist. However, consideration may be given to allowing movement between aquaculture sites under controlled conditions.

Richard Lochhead: We are interested in the science, but the reason for today's investigation is the impact on coastal communities of the current ban on scallop fishing. One of the key messages from the industry is that it thinks that there is a strong case for compensation, so we must spend time talking about that issue.

My question was whether the Executive related its policy on ASP to a policy to award £9 million

compensation to the salmon industry. I understand that the source of neither disease has been fully proven. Can the industry representatives indicate what form of compensation they are seeking?

Mr Munro: As a point of clarification, the £9 million was not given as compensation to the salmon farming industry. It was given for restructuring or for new initiatives—it was not classed as compensation.

Richard Lochhead: It related to a crisis caused by a fish disease.

Mr Stubbs: I was going to make the point that John has made. The infectious salmon anaemia scheme, which we will administer, is not a compensation package. It is for further development of the salmon sector, so the parallel is not exact.

A point was made earlier about how SERAD could assist the industry to readjust. Assistance could perhaps be provided, through Highlands and Islands Enterprise, for some market reorientation but not as compensation. Ideally, additional resources would be provided, but we have a finite budget. The ISA scheme is not a compensation package.

Richard Lochhead: My point was that the compensation arose from a crisis caused—in the main—by a fish disease.

Mr MacAlister: On compensation, article 16 of the proposed EU regulation states:

"1. The Member States may grant compensation to fishermen and owners of vessels for the temporary cessation of activities in the following circumstances:

a) in the event of unforeseeable circumstances, particularly those caused by biological factors; the granting of compensation may last for no more than two months per year, or six months over the entire period from 2000-2006. The management authority shall forward suitable scientific proof to the Commission in advance;

b) where a fisheries agreement is not renewed, or where it is suspended, for the Community fleets dependent on the arrangement; the granting of the compensation may not last longer than six months; it may be extended by a further six months, provided a conversion plan approved by the Commission is implemented for the fleet concerned".

That gives room for compensation to be considered.

The Convener: The quote related to the period beginning in 2000, so that regulation is not yet in force.

Mr MacAlister: It should be considered now; it should not be pushed below the table.

The Convener: The principle may have been conceded.

Lewis Macdonald: There is an important distinction between compensation and financial support for restructuring—we have discussed that distinction in relation to salmon farming. Will the producers' organisations respond to that point? In terms of the financial support that they are seeking, does funding for marketing initiatives and other ancillary measures address some of the problems that they have raised?

Mr MacAlister: Yes, it does. However, there is a great need to examine this more closely. We are approaching the year 2000—this year is gone now—and we do not want the problem to be shoved aside when the ban is lifted. There is room in the article for consideration of the catching and processing sectors.

Mr Munro: Do you imagine that within that regulation there is sufficient flexibility to allow compensation to the scallop farmer as opposed to the scallop fisherman?

Mr MacAlister: There should be, as we supply the same market.

Alex Fergusson (South of Scotland) (Con): I have a question on markets. I notice on the graphs that were distributed that the total number of shellfish being landed has stayed much the same and that the markets that are normally supplied from the banned areas are still being supplied. Given that the banned areas will have been cut off for some weeks, how difficult will it be to get those markets back?

Mr MacAlister: We agree that the same volume of scallops has been landed, but that is because the scallop fleet has put greater pressure on areas in which it would not normally operate at this time of year, such as the Firth of Clyde, which has relatively sheltered waters. As has been said, many small vessels are put in danger by venturing out into open waters. The North sea fishery, too, has been put under great pressure by the movement of vessels from the west coast.

The market has stayed relatively strong because the French fishery has not opened in September this year—the opening has been put back to October—and the English channel fishery has not produced as much this year as it has in the past, so there is a general scarcity. However, if the French fishery had opened in September, we would have been under even more pressure.

At this time of year, most processors usually have an abundance of frozen scallops in stock from the summer fishery; it is frightening to note that this year they do not. This week, I spoke to a processor dealing mainly in frozen scallops, who had talked to many of his colleagues in the industry. Whereas at this time of year he would normally have around 80 tonnes of scallop meat in stock, today he has 4 tonnes. As the year goes on, we will see the effects of market pressure and the damage that has been done by the closure.

Mr Hermse: The industry could be compensated through an advertising campaign, although I do not mean something like: "Buy your scallops now—they're clear of poison." [*Laughter.*] I mean a proper, co-ordinated advertising campaign to try to get the markets back up to where they were.

We must be careful when we are quoting figures on landings from each area, as they may be slightly erroneous. Much of the scallop fleet is nomadic by nature, landing in different areas. Some of the vessels that have been displaced from the Scottish fishery have travelled down to the south-west of England and into the North sea and made landings there, which has put added pressure on those fishing grounds.

The article that John MacAlister referred to relates to the Agenda 2000 European aid package, which provides compensation in areas of biological disaster and so on. Notwithstanding that, if, as Mr Stubbs suggested, we call the compensation reallocation or readjustment, we might be able to identify areas where compensation should be forthcoming.

Alex Fergusson: Thank you for clearing that matter up. I was under the impression that some of the market gap had been filled from foreign waters—if I can put it like that. However, I can see that the harvesting area has shifted.

Mr Hermse talked about getting information on the internet and Dr Davies mentioned a Canadian outbreak. Someone else mentioned the international scope of this problem. My question relates to the one asked by my colleague Alasdair Morgan. As opposed to the contemplation of what is, I suppose, the comparatively small issue of the Scottish problem, is there much international co-operation in monitoring and in research to discover a worldwide solution to this problem?

Dr Davies: In terms of research and interest, yes. There is a harmful algal blooms website and—believe it or not—scientists from all over the world have been very interested in the Scottish problem. People visit the site and add notes, helpful suggestions and so on.

On Alex Fergusson's main point, there is a huge international network of scientists who are all working on the same generic problem of algal blooms and toxins. In many areas, that work is related to nutrients, not only from fish farms but from other sources. People are trying to understand whether the incidence of algal blooms—particularly toxic algal blooms—is increasing or whether we are becoming more aware of them because we have better monitoring programmes.

Mr Munro: I have a stupid question. Dr Davies said that the algal bloom phenomenon has been well known for centuries on the west coast. Are we, as human beings, trying to defy nature by operating the fishery during the months of May, June, July and August?

Dr Davies: Like all silly questions, that is a very tricky one. I began with the old adage not to eat shellfish unless there was an 'r' in the month—that was reasonably sound advice. We are in to September, which is the exception that proves the rule. In fairness to our colleagues, I should say that, if possible, they want to be able to prosecute their fishery throughout the year, hence the evolution of the monitoring programme. The aim is to be able to make it work, so that our colleagues can have what they want and we can keep people who eat shellfish safe.

16:00

The Convener: Richard Lochhead has indicated that he wants to ask a very short question.

Richard Lochhead: I think that we have become rather distracted. Neil Fleming was hoping to say a few words about the origins of the Executive's policy on compensation.

Mr Fleming: I answered the other question first because I did not know the origins of that policy. I believe that it is established Government policy that compensation is not payable on consequential losses caused by natural events. I paused because I thought that people around the table were about to make the point that the infectious salmon anaemia payment was not compensation.

Richard Lochhead: Fair enough. I feel a parliamentary question coming on.

The Convener: As we have come to a natural conclusion to the discussion, we should thank all the gentlemen who have contributed to the debate. This subject was rather thrust upon us; the primary committee that concerns itself with ASP is—and will remain—the Health and Community Care Committee. However, we were concerned about ASP's impact on the industry, which is why we are delighted that our witnesses came along today to give us the information that we need to examine the longer term problems affecting the industry.

Before we leave the subject, there are a couple of points to consider about how this committee will progress the issue. First, Mr Fleming, as the representative from the rural affairs department, was being pushed rather further than expected on a number of issues. As a result, does the committee think that the fisheries minister should be asked certain questions about this subject?

Lewis Macdonald: Mr Fleming's evidence suggested that the issue of compensation was not exclusively a fisheries matter. Does the

Executive's approach to compensation apply equally to agriculture?

Mr Fleming: That is my understanding, but I have not done much research on the subject.

Mr Rumbles: I do not think that it would be useful to invite the minister before the committee, because it is a matter of record that Governments—whether previous Westminster Governments or the current Executive—do not go down the road of compensation; they prefer to restructure and to provide aid to industries.

The Convener: It is vital to take into account the fact that many of the issues that we have discussed today have a social impact. Perhaps we should consider this subject as part of our investigation into poverty and housing in rural areas. As a final point, does the committee think that we should report on this matter to Parliament?

Lewis Macdonald: I feel that we should draw Parliament's attention to issues such as monitoring and research. There is a need for further work to get to the roots of the problem.

The Convener: We have heard a broad explanation of the problem and have gained a reasonable understanding of the difficulties that face the industry because of ASP. I will ask the clerks to prepare a report to be circulated to committee members for approval before it is put before Parliament. The report will contain much of the information that has been gleaned from this discussion.

Lewis Macdonald: Should the report go to Parliament or to the health committee, which is the lead committee in this area?

The Convener: Because health is the paramount issue—as we will all concede—we have avoided discussing any health matters. Our prime concern has been the effects on the industry and we have restricted our comments to that subject.

I will ask the clerks to prepare the report into the industry issues raised by the problem of ASP, which will be considered by committee members and then placed before Parliament.

Mr Rumbles: What will the procedure for doing that be? Will the report come to us as individuals or will it be an agenda item for discussion at the next meeting?

Richard Davies (Committee Clerk): If it is a formal report by the committee to Parliament, the report should be brought to the committee and voted on.

The Convener: I can only end this stage of the meeting by expressing the gratitude of all committee members to our witnesses for their presentations and contributions to the discussion. I hope that, when the report becomes available, it will have justified your time and effort in coming here to work with us today. Thank you very much indeed.

I propose a two-minute recess so that people who do not want to be present for the rest of the committee's business can leave. Members of the committee are expected to stay.

16:06

Meeting suspended.

16:11

On resuming—

Plant Health (Amendment) (Scotland) Order 1999 (SSI 1999/22)

The Convener: I hope that this item will not take long, but we must address it because we are the lead committee on the statutory instrument relating to plant health. We are taking this so seriously because it is important that, as the lead committee, we are aware of statutory instruments as they pass through our hands.

This statutory instrument will stay in place as a negative instrument unless we move that it be deleted. There has been no motion for annulment and there is no reason why there should be, so it is unlikely that annulment will happen.

Given the recent experience of other committees in Westminster, it is extremely important that we should understand such instruments before we pass them. I hope that in future we handle similar orders fairly quickly, but on this first occasion we have invited experts along to go over the paper so that we understand it and know what we are approving.

We have with us Dr Jane Chard of the Scottish Agricultural Science Agency and Mr Charlie Greenslade from the Scottish Executive Rural Affairs Department.

Mr Charlie Greenslade (Scottish Executive Rural Affairs Department): Carol Brattey from the rural affairs department is also here.

The Convener: Thank you very much. We will ask you to go over the instrument that is before us so that we will understand what we will be talking about.

Mr Greenslade: Good afternoon, convener and ladies and gentlemen. The Plant Health (Amendment) (Scotland) Order 1999 further amends the Plant Health (Great Britain) Order 1993 in regard to its application to Scotland. The

principal order has already been amended a number of times. Similar amendment instruments are being made in England, Wales and Northern Ireland.

The purpose of the amendments is to implement in the UK council directive 98/57/EC of 20 July 1998. That directive relates to the control of *Ralstonia solanacearum* (Smith) Yabuuchi et al. That organism was previously known as *Pseudomonas solanacearum* (Smith) Smith. Even micro-organisms can change their names.

The directive introduces harmonised measures to deal with this disease across the European Community. Article 1 of the directive summarises the purpose of the directive as being

"to locate the organism and determine its distribution; to prevent its occurrence and spread; and to control it with the aim of eradication."

Article 12 of the directive requires each member state to bring the provisions into force within national laws by 21 August 1999, and to notify the Commission that that has been done.

16:15

Ralstonia solanacearum is an organism that causes brown rot in potatoes and bacterial wilt in tomatoes. In Scotland, without wanting to diminish our tomato-growing industry in any way, our principal concern is potatoes and, in particular, our important seed potato industry. A brown rot infection can seriously deplete potato yields and make infected potatoes unusable. To illustrate that, I have circulated a photograph showing the symptoms in a growing plant and in tubers.

To put the disease into context, the coming into force of the directive brings to four the number of quarantine diseases of potato that are deemed significant enough to warrant a separate EC directive on their control and eradication. Members may have heard of some of the others. I will not give their Latin names, but their English names are potato wart disease, potato cyst nematode—better known as eelworm—and potato ring rot. Each of the three previous directives has been implemented in Great Britain by the insertion of a separate schedule into the principal instrument—the plant health order. That approach is again being adopted in respect of *Ralstonia solanacearum*.

Unlike the potato cyst nematode and potato wart disease, both of which occur in Scotland, with the former continuing to be a major problem, neither potato ring rot nor potato brown rot is known to occur here. However, they do occur within the European Community and beyond. For example, in recent years, brown rot has occurred in the Netherlands and ring rot in Germany. In southern England, there have been two outbreaks of brown rot in potatoes and two instances of bacterial wilt in tomatoes.

Ralstonia solanacearum can subsist in water and in the woody nightshade plant, which is of the same family as the potato and tomato and which is found on many riverbanks in southern England and is known to be an excellent host of the organism. The control and eradication measures, therefore, have to have regard to transmission both by potato tubers and by irrigation with infected water.

It must be remembered that the directive and the order that implements it in Scotland are designed to be read together and concern the steps that would be taken to deal with an outbreak of the disease. We do not have brown rot in Scotland and we hope that we will have no reason to bring the measures into practice. I have distributed to members an information sheet that has been made available to the industry in this country and beyond, summarising the measures that we take to keep Scotland free of brown rot. If needed, I can go through it in detail at the end of my contribution. Otherwise, I shall move on to look at the various parts of the instrument.

To understand the amendment order fully, one must read it in conjunction with the principal order and with the parent directive. The principal order—the Plant Health (Great Britain) Order 1993, which has been amended many times—already contains provisions enabling official inspectors to enter premises and to take samples of plant material, plant pests or other objects for the purposes of ascertaining whether any scheduled plant pest or disease is present. The amendment order introduces a number of new provisions.

Article 2 introduces into the principal order a requirement that no potato shall be planted unless it derives from parent material that has been tested and found to be free of the brown rot organism.

Article 3 empowers an official inspector to demarcate zones of infection with the attendant provisions and restrictions that bear on the planting of tubers, the cleaning of machinery and the irrigation of crops. Those provisions and restrictions are set out in a schedule to the order.

Article 4 substitutes in the principal order, on each occasion that it occurs, the new name for the organism, *Ralstonia solanacearum*, instead of the previous name, *Pseudomonas solanacearum*.

Article 5 inserts into the order a new schedule, 13A, which is the meat of the amendment and which details special measures for the control of the organism.

Article 6 adds council directive 98/57/EC, which we are implementing here, to the long list of other

directives in the area of plant health that supplement the principal EC plant health directive.

Would members like me to go through schedule 13A in more detail?

The Convener: Just to ensure that we understand what it relates to.

Mr Greenslade: The schedule has to ascribe various meanings to certain key words and phrases—that is what paragraph 1 does. Members may notice that the true seed of the potato plant and the fruit and seed of the tomato are excluded from the definition of "specified plant material". That is because those seeds and fruits do not transmit the disease and therefore do not pose a problem.

Paragraph 2 of the schedule prohibits the planting in Scotland of designated affected plant material. It provides for the issue of notices by the rural affairs department specifying how affected material should be disposed of, for example, by incineration, by feeding it to animals following heat treatment, by deep burial in the ground or by processing under certain conditions.

Paragraph 3 deals with plant material which is suspected of being contaminated. It provides for the issue of notices on how that material should be dealt with. That applies to ware potatoes for consumption or processing, if there is only a suspicion of a problem.

Paragraph 4 provides that notices may require the cleaning or destruction of any machinery, vehicle or packaging material designated as contaminated.

Paragraph 5 prohibits the holding or handling of the organism or affected plant material other than where that is authorised for the purposes of scientific research. A licence has to be issued for that.

Paragraph 6 enables notices to contain the measures specified in paragraphs 7 to 10 of the schedule to be employed in demarcated zones of infection.

Paragraph 7 specifies detailed measures that the notice may require to be taken where a place of production has been designated as contaminated. Those include, for defined periods and depending on the circumstances, measures to deal with volunteer plants: self-sown potatoes, or groundkeepers, as they are sometimes called. Included is a prohibition on the planting of the solanaceous and brassica species. For a certain time thereafter, the planting of solanaceous plants may only be undertaken under certain conditions. In such circumstances, during defined periods, there is an alternative strategy, in which volunteer plants are dealt with and the land is maintained in fallow conditions or put to cereal growing or pasture, or maintained in grass, for seed production. After a further period, that land can be used for growing potatoes or tomatoes, but only under certain conditions.

Paragraph 8 deals with circumstances in which there is a complete replacement of the growing medium. In this case, a unit is used to develop the early generations of potatoes, and certain protected crop production takes place, under glass for example. That allows the grower to replace the growing medium completely, and takes away any problem of contamination. The authorisation would be subject to certain additional conditions.

Paragraph 9 specifies measures that the notice may require to be taken regarding fields that are adjacent to affected areas. Included, for defined periods, are measures to deal with volunteer plants, the prohibition of planting potatoes or tomatoes and, thereafter, as with other provisions, restrictions on the planting of potatoes and tomatoes.

Paragraph 10 specifies that where a place of production has been designated as contaminated, any notice that has already been issued may require machinery to be cleansed and disinfected. It also empowers inspectors to prohibit or control irrigation, which, as we mentioned earlier, is appropriate because brown rot bacteria are waterborne and irrigation is one means of spreading them.

Finally, paragraph 11 of the schedule permits the notice specifying measures regarding a zone that has already been demarcated as being probably contaminated. Again, those measures would include the cleaning of machinery and stores and restrictions on the planting and handling of potatoes. Paragraph 11 also prohibits the use of surface water, which has been designated to be contaminated, for irrigation or spraying of specified plant materials, or other host plants, unless there has been authorisation to the contrary. An inspector would only authorise to the contrary in circumstances where they felt that there was no risk of the organism spreading.

Paragraph 11 also provides that contaminated liquid waste from premises involved in the processing or packaging of potatoes or tomatoes is to be disposed of under official supervision. That is to reduce the risk of spreading the material from processing plants back into the growing areas.

That is what the order does. Does the committee want me to go over the measures that we have in place in Scotland for dealing with the threat of brown rot?

The Convener: I think that that falls outwith the concern of the committee. What is important is that we are confident that we understand what the statutory instrument relates to and are satisfied

that it is designed specifically to deal with the issues before us and does not stray into other areas. Do members have any questions relating to the explanation?

If there are no questions relating to the explanation, we have achieved what we set out to do. We have had the benefit of listening to someone who understands the reasons and terms behind the statutory instrument that is laid before us and we are now in a position to make the decision that is required.

I thank the witnesses for attending the committee. You are now free to leave.

Richard Lochhead: I found that statement very useful in understanding the statutory instrument. However, one way forward might be to have that statement before the committee meeting when we first receive the statutory instrument. At that stage, if any member had questions that they wanted to put to officials they could notify the clerk, and representatives could be invited to the meeting.

The Convener: That would be a practical way of dealing with such instruments in the future.

Richard Lochhead: It would save time, both for us and for the department.

16:30

The Convener: The clerk has pointed out to me that witnesses must have left the meeting before we can progress to make any formal decisions. A problem apparently arose in another committee.

At this stage, I must put the question to the committee: does the committee agree that the Plant Health (Amendment) (Scotland) Order 1999 need not be drawn to the attention of the Parliament? Members are agreed. That information will be communicated to the Parliament.

Alex Fergusson: How can witnesses be asked to leave an open public meeting?

The Convener: We can ask them to sit elsewhere.

Alex Fergusson: Oh, they must move out of the position of being able to give evidence. That is fair enough.

The Convener: That takes care of the statutory instrument regarding potatoes.

Environmental Impact Assessment (Forestry)(Scotland) Regulations 1999 (SSI 1999/43)

The Convener: This committee is not the lead committee on this order. I am told that the Transport and the Environment Committee will meet tomorrow, and we have been asked to make comments on the document to be passed to that committee at that meeting. Does anyone have any comments on the statutory instrument? Is there any comment that members feel would be appropriate to pass on to the Transport and the Environment Committee?

Lewis Macdonald: I have looked at the document, as have other colleagues, I am sure. It seems sensible to include deforestation as well as other changes under the consents that are required by the environmental impact assessment requirements. It seems to do that in a balanced way. The fact that there have been objections from people who felt that the requirements were going too far, or not far enough, suggests that those requirements are not far wrong.

The Convener: Do members feel that we need to read through the document? If not, I think it is appropriate to report that this committee does not feel the need to pass comments on this issue to the Transport and the Environment Committee. That will be the comment that is passed on from this committee.

That brings us to the end of the agenda. There has been a great deal of publicity in the news regarding the beef-on-the-bone ban. I do not raise that as an issue. I merely note that we should monitor the situation so that the visit of the chief medical officer, who will come before this committee at its next meeting in response to an item that was put on the agenda by Mike Rumbles at a previous meeting, will be best exploited for the good of the health of the nation and the industry that has been affected.

Noting that we have no other competent business, is there anything else that anyone would like to raise that is relevant to the business of today's meeting? If not, I declare this meeting closed.

Meeting closed at 16:34.

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