



Cynulliad Cenedlaethol Cymru **The National Assembly for Wales**

Y Pwyllgor Amgylchedd a Chynaliadwyedd **The Environment and Sustainability Committee**

Dydd Iau, 9 Mai 2013
Thursday, 9 May 2013

Cynnwys **Contents**

Cyflwyniad, Ymddiheuriadau a Dirprwyon
Introductions, Apologies and Substitutions

Ymchwiliad i Rywogaethau Goresgynnol Estron—Tystiolaeth gan Awdurdodau Lleol a Pharciau Cenedlaethol
Inquiry into Invasive Alien Species—Evidence from Local Authorities and National Parks

Ymchwiliad i Rywogaethau Goresgynnol Estron—Tystiolaeth gan Cyswllt Amgylchedd Cymru
Inquiry into Invasive Alien Species—Evidence from Wales Environment Link

Ymchwiliad i Rywogaethau Goresgynnol Estron—Tystiolaeth gan Undeb Amaethwyr Cymru ac NFU Cymru
Inquiry into Invasive Alien Species—Evidence from Farmers' Union of Wales and NFU Cymru

Ymchwiliad i Rywogaethau Goresgynnol Estron: Tystiolaeth gan Cyfoeth Naturiol Cymru ac Ysgrifenyddiaeth y Rhywogaethau Estron
Inquiry into Invasive Alien Species: Evidence from Natural Resources Wales and Non-native Species Secretariat

Yn y golofn chwith, cofnodwyd y trafodion yn yr iaith y llefarwyd hwy ynnddi. Yn y golofn dde, cynhwysir trawsgrifiad o'r cyfieithu ar y pryd.

In the left-hand column, the proceedings are recorded in the language in which they were spoken. The right-hand column contains a transcription of the simultaneous interpretation.

Aelodau'r pwyllgor yn bresennol
Committee members in attendance

Mick Antoniw	Llafur Labour
Yr Arglwydd/Lord Elis-Thomas	Plaid Cymru (Cadeirydd y Pwyllgor) The Party of Wales (Committee Chair)
Russell George	Ceidwadwyr Cymreig Welsh Conservatives
Vaughan Gething	Llafur Labour
Llyr Huws Gruffydd	Plaid Cymru The Party of Wales
Julie James	Llafur Labour
Julie Morgan	Llafur Labour
William Powell	Democratiaid Rhyddfrydol Cymru Welsh Liberal Democrats
Antoinette Sandbach	Ceidwadwyr Cymreig Welsh Conservatives

Eraill yn bresennol
Others in attendance

Nigel Ajax-Lewis	Ymddiriedolaethau Natur Cymru Wildlife Trusts Wales
Gethin Bowes	Cyngor Bwrdeistref Sirol Caerffili Caerphilly County Borough Council
Phil Griffiths	Cyngor Bwrdeistref Sirol Caerffili Caerphilly County Borough Council
Andrew Gurney	Swyddog Polisi (Defnydd Tir), Undeb Amaethwyr Cymru Policy Officer (Land Use), Farmers' Union of Wales
Sean Hathaway	Dinas a Sir Abertawe City and County of Swansea
Jane Hodges	Ecolegydd, Awdurdod Parc Cenedlaethol Arfordir Penfro Ecologist, Pembrokeshire Coast National Park Authority
Dafydd Jarrett	Ymgynghorydd Polisi Ffermydd, NFU Cymru Farm Policy Adviser, NFU Cymru
Dr Niall Moore	Pennaeth Ysgrifenyddiaeth y Rhywogaethau Estron Head of Secretariat, Non-native Species Secretariat
Neville Rookes	Swyddog Polisi—Amgylchedd, Cymdeithas Llywodraeth Leol Cymru Policy Officer—Environment, Welsh Local Government Association
Joanne Sherwood	Pennaeth Cynllunio Adnoddau Naturiol, Cyfoeth Naturiol Cymru Head of Natural Resource Planning, Natural Resources Wales

Nick Thomas Rheolwr Safleoedd Gwarchoddedig Gogledd Cymru, Cyfoeth
Naturiol Cymru
Protected Sites Manager for North Wales, Natural Resources
Wales

Emyr Williams Cyfarwyddwr Rheoli Tir, Awdurdod Parc Cenedlaethol Eryri
Director of Land Management, Snowdonia National Park
Authority

Swyddogion Cynulliad Cenedlaethol Cymru yn bresennol
National Assembly for Wales officials in attendance

Catherine Hunt Clerc
Clerk

Elfyn Henderson Gwasanaeth Ymchwil
Research Service

Mike Lewis Dirprwy Glerc
Deputy Clerk

Cynhaliwyd y cyfarfod yng Ngardd Fotaneg Genedlaethol Cymru, Llanarthne.
The meeting was held in the National Botanic Garden of Wales, Llanarthney.

Dechreuodd y cyfarfod am 10.00 a.m.
The meeting began at 10.00 a.m.

Cyflwyniad, Ymddiheuriadau a Dirprwyon
Introductions, Apologies and Substitutions

[1] **Yr Arglwydd Elis-Thomas:** Bore da **Lord Elis-Thomas:** Good morning, all, and
i chi gyd, ac fel un a aned yn sir Gâr— as someone who was born in
[*Anghlywadwy.*] Carmarthenshire—[*Inaudible.*]

10.01 a.m.

Ymchwiliad i Rywogaethau Goresgynnol Estron—Tystiolaeth gan Awdurdodau
Lleol a Pharciau Cenedlaethol
Inquiry into Invasive Alien Species—Evidence from Local Authorities and
National Parks

[2] **Yr Arglwydd Elis-Thomas:** Croeso **Lord Elis-Thomas:** A warm welcome to you
arbennig i chi gyd, fel panel. A hoffech, bob all as a panel. Would each of you, in turn,
yn un, ddweud rhyw air agoriadol cyn i ni like to make a few opening comments before
fynd ymlaen i ofyn ein cwestiynau? Rwy'n we move to questions from Members? I am
edrych ar Neville Rookes, swyddog polisi looking at Neville Rookes, policy officer for
Cymdeithas Llywodraeth Leol Cymru—a the Welsh Local Government Association—
hoffech gychwyn sylwadau'r panel? would you like to start?

[3] **Mr Rookes:** I am Neville Rookes, policy officer for the environment for the Welsh
Local Government Association. We have, for some time, been aware of invasive non-native
species, and there is concern in various authorities throughout Wales about this issue. Actions
are being taken to try to remove these INS, as we refer to them—the invasive non-native
species—to a greater and lesser extent in many places. I think that the overriding concern for
all of us in local authorities is with regard to records and monitoring, and the non-statutory
nature of the control and monitoring of these non-native species. Hopefully, through this
inquiry, some of those issues may be addressed.

[4] **Mr Williams:** Yn ychwanegol at bapur CLILC a'n papur ni, byddwn yn tynnu'ch sylw at y ffaith bod gwaith wedi cael ei wneud ar lefel Ewropeaidd ar rywogaethau ymledol. Y trydydd prif ffactor sy'n rhoi'r tirweddau hyn o dan berygl yw'r rhywogaethau hyn. Roedd gwaith wedi cael ei wneud gan gonfensiwn Bern yn 2003 a nododd hyn yn gynnar. Rydym yma heddiw oherwydd bod bwriad i ddeddfu yn erbyn y rhywogaethau hyn.

Mr Williams: In addition to the paper that we presented and that of the WLGA, I would draw to your attention the work undertaken at a European level on invasive species. The third main factor putting landscapes at threat is these species. Work was done by the Bern convention in 2003 that identified this at an early stage. We are here today because there is an intention to legislate on the issue of invasive species.

[5] Bûm yn ffodus i fod yn rhan o gynhadledd yn yr Eidal yn edrych yn benodol ar y mater hwn. Mae gŵr gwybodus iawn yn gweithio i'r parciau yn yr Eidal, a gallaf roi ei fanylion cyswllt i'ch swyddogion—mae ganddo ddealltwriaeth eang iawn ar lefel Ewropeaidd.

I was fortunate to be part of a conference in Italy that looked specifically at this matter. There is a very knowledgeable gentleman working for the parks in Italy, and I can provide his contact details to your officials—he has a very broad understanding of the European dimension.

[6] Rydym ni, ym mharc cenedlaethol Eryri, wedi cynnal un cynllun peilot ar y *Rhododendron ponticum*—rhywogaeth sydd yng ngardd y Cadeirydd ond sydd hefyd wedi lledu allan i'r amgylchedd naturiol.

We, at Snowdonia national park, have undertaken one pilot scheme on *Rhododendron ponticum*—a species to be found in the Chair's garden but that has also spread out to the wider natural environment.

[7] **Yr Arglwydd Elis-Thomas:** Nid o'm gardd i y mae wedi lledu. [*Chwerthin.*]

Lord Elis-Thomas: It has not spread from my garden. [*Laughter.*]

[8] **Mr Williams:** Mae Jane yma heddiw hefyd i siarad am y sefyllfa yn y môr, sydd yr un mor ddyrys ond ychydig yn fwy cymhleth.

Mr Williams: Jane is also here today to discuss the marine issues, which are just as serious, but a little more complex.

[9] Mae'n rhaid inni sylwi bod newid yn yr hinsawdd yn ffactor yma, hefyd. Mae rhywogaethau brodorol o dan straen, a bydd y rhywogaethau ymledol hyn o bosibl mewn cyflwr mwy ffafriol i allu ymledu ymhellach gyda newid yn yr hinsawdd.

We must also be aware that climate change is also a factor here. Native species are being put under strain, and these invasive species might find conditions more favourable to be able to spread further as a result of climate change.

[10] Yr hyn sydd hefyd yn bwysig yw ystyried, ar raddfa parc cenedlaethol yn benodol, y newid tebygol mewn defnydd tir, yn enwedig mewn systemau pori. Rydym wedi gweld yn barod yn Eryri bod rhododendron, a *Himalayan balsam*, o bosibl, yn dwysáu os yw lefelau pori'n mynd yn isel. Mae cynlluniau amaeth-amgylcheddol fel Tir Gofal a Glastir yn gallu cyfrannu'n anymwybodol at ledaenu rhywogaethau ymledol gan nad oes dadansoddiad cywir wedi ei wneud o'r ardal yn hytrach na'r fferm. Mae angen rhoi'r cynefin yn ei gyd-destun.

It is also important that we consider, particularly at the national-park level, the likely change of land use, particularly in grazing systems. In Snowdonia, we have already found that rhododendron and, perhaps, Himalayan balsam grows more intensively if grazing levels are reduced. Agri-environment schemes such as Tir Gofal and Glastir could unknowingly contribute to the spread of these invasive species because no correct analysis has been carried out of the area rather than the individual farm. We need to put these habitats in their context.

[11] Mae parciau cenedlaethol yn wahanol; mae gennym gynllun rheoli ar gyfer y parc er mwyn nodi beth sy'n bwysig. Fel rhan o'r cynllun rheoli, rydym yn adrodd ar gyflwr y parc yn achlysurol, felly mae rhywogaethau ymledol yn ymddangos fel bygythiad i gyflwr y parc yn ei gyfanrwydd. Rydym yn edrych ymlaen at weld a yw'r dull newydd o ystyried cefn gwlad a systemau, fel y dull ecosystemau, yn cynnwys rheolaeth o'r rhywogaethau hyn. Rydym wedi dysgu o'n gwaith bod rhaid deall y planhigyn neu'r anifail—yr hanes a'r polisiau. Mae'n bwysig hefyd bod y gymuned yn prynu fewn i'r ffaith bod angen rheoli gwahanol rywogaethau.

The national parks are different; we have a management plan to note what is important. As part of that plan, we report on the condition of the park on a regular basis; therefore, invasive species are highlighted as a threat to the general condition of the park. We look forward to seeing whether this new approach of considering the countryside and systems, like the ecosystems approach, will include management of these species. We have learned from our work that you have to understand the plant or the creature—its history and the policies. It is also important that the community buys in to the need to manage various species.

[12] Cefais brofiad tua chwarter canrif yn ôl ym Meddgelert pan oeddwn yn trio torri llwyn rhododendron. Roeddwn yn cael ein galw'n fwrdrwrs ac yn y blaen achos roedd y gymuned ym Meddgelert yn gweld gwerth economaidd i'r rhododendron am fod bysys yn dod i weld Eryri yn binc. Mae addysg wedi symud ymlaen ac mae'r gymuned honno bellach yn deall bod rhododendron yn fygythiad mawr i'r ardal.

I had an experience, some 25 years ago, in Beddgelert when I was trying to cut a rhododendron hedge. We were being called murderers and so on because the community in Beddgelert saw an economic value to the rhododendron because buses would come to see Snowdonia in pink bloom. Things have moved on now, that community has been educated and it understands that rhododendron is a huge threat to the area.

[13] Yn fras, arian yw ein problem. Rydym yn gwybod beth rydym eisiau ei wneud. Mae yna gynlluniau amaeth-amgylcheddol ac hwyrach y byddai pethau fel rhododendron, *knotweed* a *Himalayan balsam* a minc yn gallu ymddangos yn fwy clir ynddynt, ond mae diffyg ar ochr yr arfordir.

Briefly, our problem is funding. We know what we want to do. There are agri-environment schemes and perhaps things like rhododendron, knotweed, Himalayan balsam and mink could be identified more clearly in them, but there is a problem on the marine side.

[14] **Lord Elis-Thomas:** Jane Hodges, would you like to say something more from the point of view of Pembrokeshire Coast National Park and the marine and coastal environment?

[15] **Ms Hodges:** It is very difficult to draw direct comparisons between the marine environment and the terrestrial environment in many respects. In the marine environment, we are faced with even greater challenges in terms of knowing and understanding where invasive non-native species are, what they might be threatening and what assets, both economic and in terms of biodiversity, are at risk. Both the Snowdonia National Park Authority and the Pembrokeshire Coast National Park Authority are relevant authorities in terms of marine special areas of conservation. We have some experience in trying to understand and become much more aware of invasive non-native species in the marine environment.

[16] In the Pembrokeshire Coast National Park area and the marine environment around that, we are aware of at least 35 invasive non-native species. Those are species that are known to be invasive or have the capacity to be invasive, as opposed to merely being non-native species. Given the nature of the area, Milford Haven is a hotspot. It is a hotspot in UK terms. It is an international port and therein lies a lot of the problems and the history behind the

invasive non-native species in the marine environment.

[17] I would like to say a few words about the particular challenges in gaining a thorough understanding of issues in the marine environment. They relate largely to the fact that it is out of sight for most of us. A lot of things might be happening on the sea bed, but, without very thorough surveillance, we would not know until it was too late. In Milford Haven, there is one example of a marine invasive non-native species that is now beyond any sort of measure of control and that is the American slipper limpet, or *Crepidula fornicata* to give it its scientific name. That has been around for some time now and it has smothered much of the sea bed, wherever it has been able to gain a foothold, throughout the Milford Haven waterway. That particular species is known to be able to impact not just on sea bed biodiversity—our native species and habitats on the sea bed—but also on commercial shellfishery interests. It can smother and seriously impact, for example, native oyster beds. We are aware that we already have some very well established invasive non-native species in the marine environment around the coasts of Snowdonia and Pembrokeshire national parks.

[18] Importantly, in terms of biodiversity, some of these species have the capacity to seriously affect the favourable conservation status of some of our features of European importance for which the marine SACs have been designated. They can contribute to an unfavourable conservation status in some instances. Their impact on both biodiversity in the marine environment and in terms of the commercial fishery aspects, for example, can, therefore, be very significant indeed.

[19] However, as I say, one of the greatest challenges is to know and understand exactly where these things are and what they are doing in the marine environment. I would suggest that, if we are honest, the surveillance and databases on some of these things are probably too inaccurate and inadequate to allow us to come to firm conclusions on exactly what these species are doing at the moment and what they are threatening. We know quite a lot about some species; we may not know whether others are here yet. This reflects the fact that it is a very challenging environment in which to carry out routine surveillance and monitoring. It is also a very expensive environment in which to operate.

[20] We also know that, by the very nature of the marine environment, once something becomes established it can be very difficult to get rid of it. There are one or two examples in Wales where successful attempts have been made to control and eradicate invasive non-native species. Perhaps the best known and well documented is the successful attempt to get rid of carpet sea squirt from a marina in Holyhead. However, that took three winters of sheer hard work on the part of the partners involved and a lot of money. By the way, funding for that came from private sources—from marine operators and local commercial interests—as well as Government sources. A very strong partnership worked together to get rid of the sea squirt from that marina. However, that is one of the few examples where, once established, marine invasive non-native species have been successfully tackled and removed.

[21] This leads me on to what can be done. I guess that the key messages that we would like to get across this morning are that we need vigilance, much better surveillance and a better understanding of these things in the marine environment, and an understanding of the risks and threats that they pose to biodiversity and economic assets. We also need to understand the need for biosecurity—the key thing that we need to think about is stopping these species from arriving in the first place. That is, obviously, a very difficult thing to achieve when you are dealing with international trade routes. Incidentally, quite a lot of the things that are now established in our coastal waters have arrived from areas, such as the Sea of Japan, that have quite similar marine environments, in terms of sea temperatures and that sort of thing, to the cool temperate-zone waters that surround our coast. Many of these things come from marine environments that are similar to ours.

[22] What we do not know, and this is where vigilance and horizon-scanning are definitely required, is what long-term climate change may bring, for example. This is a factor that we need to think about very seriously in both the terrestrial and marine environments. It is about biosecurity, biosecurity, biosecurity—not just in our ports, harbours and marinas, but in all aspects of mariculture, in the movement of things like shellfish stocks and the equipment that is used to culture things like oysters and mussels, even down to the trestles used. Biosecurity has to be our main weapon of defence, if you would like to put it that way.

[23] **Lord Elis-Thomas:** Thank you very much for that answer. I think that we would also like to hear from our local authority representatives from the City and County of Swansea Council and Caerphilly County Borough Council. Who would like to start?

[24] **Mr Hathaway:** Thank you, Chair; I will start. Thank you for inviting me along today. Swansea has been involved, specifically at the beginning of the invasive non-native species process, with Japanese knotweed, and that has probably been since the early 1990s; we are probably infamous for that particular species. I admit that we probably had the worst outbreak of that particular plant in Wales, if not the UK.

10.15 a.m.

[25] However, we have been taking action since at least 1997, when we started or launched our action plan for the control of Japanese knotweed. Since then, things have happened and we have, or did, spend a lot of money on treatment. A lot of that funding came from what was then the Welsh Development Agency from, for example, the highways corridor and transport corridor. Unfortunately, we do not have the funding any more to deal with these big knotweed control contracts. I have an example here, if anybody wants to have a look at it, of the last one that we finished controlling or treating about four years ago. There were about 100,000 sq m of knotweed in Swansea; the smallest area was a couple of metres and the biggest area was about 18,500 sq m in one site.

[26] Not only do you need the funding to actually carry out the treatment over a three-year period, but the landscape designers and I have to go out to measure all these sites, draw them up and put them on a system, and you then have to send several documents out to the tenderers. The process and the resources required to run a contract such as this are quite onerous. On the printing, for example, the maps that went out to the contractors were AO size, which is the same size as the picture on the wall, and were in colour. Probably around 50 pages went out to several contractors and the printing costs alone were several hundred pounds. It is not the type of thing that you expect to have to take into account. The figures and the treatment results were fairly good, but it brought home the need for long-term monitoring. It is no good doing this for three years and then there being no more funding, because when you come back in four, five, six or seven years, there will probably be some knotweed there or other species that will have come in. That contract was probably just around the £100,000 mark, so it is a lot of money for a local authority to put in to something that is an unusual issue for people perhaps not in Swansea.

[27] We have done a few other things. We started off with Japanese knotweed, but now we seem to take into account all the other normal or common-or-garden non-native species, such as balsam and a lot of the other aquatic ones. Rhododendron in our country park is a good example. We luckily had money from the Forestry Commission and the Department for Environment, Food and Rural Affairs because we had a sudden oak death outbreak and we spent nearly £750,000 clearing about 40 ha of rhododendron out of the country park in Swansea. That is money that we would not have had unless the rhododendron was affected. So, that is quite a good way of getting funding in sometimes, if there is an issue that needs to be dealt with.

[28] We have also been involved in a rapid response, which again is part of DEFRA's response to non-native species, when we had an outbreak of water primrose, which is an aquatic species. Luckily, that was reported down the line via the non-native species secretariat and that is under treatment via what was the Environment Agency, but is now Natural Resources Wales.

[29] I will give you another idea of funding: our housing department, last financial year, spent approximately £22,000 of its maintenance budget on knotweed, which is a lot of money to spend on a single plant in people's gardens. We get a lot of problems with people phoning up about mortgages, which is probably another meeting on its own to be quite honest. I must admit that I probably get several phone calls a day regarding knotweed and mortgages, and if it is not on local authority land, it is not really a local authority issue. That is something for the lenders, surveyors, et cetera to sort out. If it is on local authority land, then maybe we can get involved with treatment in that way.

[30] On the biodiversity problems, there are habitat action plans and species action plans on, for example, ancient woodland, dry acid grassland and all the normal types of habitat. If you go through our local biodiversity action plan, virtually all the habitats and species have a threat from various things, whether it is overgrazing, vandalism or litter, and they nearly all have invasive non-native species as one of those threats. So, you get the biodiversity issue there as well.

[31] To go back to some of the previously highlighted points, from a local, regional and Wales-wide point of view, we certainly need more input in funding, awareness-raising, surveying to know what we have and have not got, and legislation to perhaps put some sort of onus on the landowner, whoever it may be, to deal with these issues, not only in the short term, but in the long term as well.

[32] **Lord Elis-Thomas:** Thank you, again. Would Caerphilly County Borough Council care to comment?

[33] **Mr Griffiths:** Thank you, Chair. I am Phil Griffiths. I am here in a Caerphilly capacity and a Heads of the Valleys capacity, as authority chair of the Heads of the Valleys partnership for invasive plant species, which includes Blaenau Gwent, Merthyr Tydfil, Rhondda Cynon Taf and Torfaen. We set ourselves up as a partnership regime in response to problems that we were having with invasive species and the ways that we were dealing with them, primarily through the Welsh Development Agency. The WDA would give us grants of 80% to go away and let contracts to deal with the species. The contracts were proving to be exceptionally problematic. That was partly because they only ran for three years, and you will not eradicate Japanese knotweed in many cases within three years, and partly because of the amount of hidden officer time it took to monitor proceedings. We were fortunate enough to have funding from Europe and the Welsh Government to set up this partnership and it has been running now for five years. I would reiterate the points that have been made regarding the ecological side and landscape side. However, the main problem now is the economic issues facing the Heads of the Valleys, in terms of the problems that knotweed is causing for local authorities' maintenance regimes in damage to infrastructure, and, primarily, on development sites for all parties, as it is now becoming standard practice to have conditions on planning consents to remove knotweed prior to development or have a method statement in place, and we feel that there is evidence coming through that developers are avoiding contaminated sites.

[34] I am pleased to say that, in Caerphilly and the Heads of the Valleys area generally, we have had a thorough survey done. We have used all sorts of high-tech data, such as light detection and ranging data, which people may have seen on *Time Team* and is basically plotting from satellites. So, we know that, in Caerphilly, we have at least 850,000 sq m of

knotweed and it is probably a little more than that. A third of that is already under treatment. Therefore, the message there is that it is doable and treatable but it takes time. I am pleased to say that the cost for dealing with these things is about 50p per square metre. So, it is not a cheap option, but, when compared to other options such as using contractors, which comes in at somewhere between £1 and £2.50 per square metre, or landfill, which can be over £6 per square metre, it is cost effective. As a partnership in the Heads of the Valleys, we are spending in the region of £100,000 per annum on treating Japanese knotweed and we do ancillary works on the other two species that have been mentioned. Giant hogweed is a tricky one for local authorities, because that species has an adverse effect on humans: if they rub against it, their skin will blister for a number of years. The other is Himalayan balsam, because it spreads so quickly. Therefore, I would like to reiterate and support what the other speakers have said so far. It is a big issue, but our five-year experience to date is that it is possible to do something about it.

[35] **Mr Bowes:** I would like to agree with everything Phil said. In Caerphilly alone, we have been treating such species since 2006, so that is slightly longer than the Heads of the Valleys partnership, which has been running since 2008 or 2009. The primary focus has been on Japanese knotweed, Himalayan balsam and giant hogweed. It has been my job to settle it on the ground, as it were. Most of my time is spent on-site, with a knapsack on my back. We have split the project into four main areas of survey. As Phil said, we have used near-infrared technology to give us aerial coverage of the county borough. That has been pretty effective, but it needs an element of ground truthing as well, which is very time-consuming and costly. We have GIS and GPS technology that we use out on site that can plot the sites that we are treating. They can then be recorded as part of our herbicide application record so that they do not get lost in the ether; they stay on our treatment programme for three seasons and then get monitoring as required. We think that we have tweaked the treatment process for Japanese knotweed to stop it from producing new growth within about three seasons, but, as Sean alluded to, it takes an on-going monitoring programme to stop the new growth that may come back. It may be that there is no new growth in year three or four, but there might be some in year five or six. The longevity of the treatment programme is the key to it. The advisory element of the project is quite significant and, as Sean said, we get numerous calls from members of the public whose knotweed problem is affecting their mortgage applications. That is cropping up almost daily. Surveyors are highlighting the problem, because, if there is knotweed within sight of the property, they are flagging it up, which is a barrier to people getting mortgages or releasing equity.

[36] We have had quite a significant element of community involvement and have trained volunteers to treat. We have used volunteers for survey, and for tackling Himalayan balsam by cutting or pulling. So, I think that we have covered those five elements quite well since we started the project.

[37] **Lord Elis-Thomas:** I am very impressed by the extent of activity that has been going on. I was aware of some of it, obviously. Before I call on Julie, who I think was the first to indicate among our colleagues here, I would like to ask who you think should be responsible for this in terms of an all-Wales oversight, in partnership with local authorities and national parks authorities. Do you have a view on that?

[38] Emyr, rwy'n siŵr bod gennych chi farn. Emyr, I am sure that you have an opinion.

[39] **Mr Williams:** Rydym wedi ei gwneud yn glir yn ein datganiad ein bod yn meddwl mai'r unig gorff sydd â throsolwg o hyn yng Nghymru yw'r corff newydd, Cyfoeth Naturiol Cymru, ond mae'n bwysig **Mr Williams:** We have made it clear in our statement that we think that the only body that has an overview of this in Wales is the new body, Natural Resources Wales, but it is important that that organisation understands

i'r corff hwnnw ddeall bod partneriaethau lleol sydd efallai mewn gwell sefyllfa i ddarparu gwasanaeth rheoli na'r corff ei hun o ran gwneud y gwaith ar y ddaear.

that there are local partnerships that are perhaps better placed to provide a management service than NRW itself in terms of carrying out the work on the ground.

[40] **Yr Arglwydd Elis-Thomas:** I ddilyn hynny, a oes cytundeb ymhlith y panel hwn, ei fod yn addas i ddisgwyl i Gyfoeth Naturiol Cymru i wneud y gwaith hwn? Hefyd, gwn ei fod yn gynnar, ond a ydych yn ymwybodol o unrhyw drafodaethau sydd wedi digwydd? Fe fyddwn yn siarad â'r corff hwnnw yn nes ymlaen y bore yma, ac fe ddilynwn i fyny efo adroddiad ac argymhellion, busawn yn meddwl, oherwydd maint y broblem. Felly, a oes gennych unrhyw wybodaeth bellach, ac a oes cytundeb ymhlith y panel mai dyma yw'r ffordd ymlaen?

Lord Elis-Thomas: To follow on from that, is there an agreement among the panel that it is appropriate to expect NRW to do this work? Also, I know that it is early days, but are you aware of any discussions having taken place? We will be talking to that organisation later this morning, and following up with a report and recommendations, I would think, because of the size of this problem. So, do you have any further information, and is there agreement among the panel that this is the way ahead?

[41] **Mr Williams:** Medraf ond ymateb ar ran y parciau; rydym yn disgwyl i Gyfoeth Naturiol Cymru roi cyfeiriad. Mae ganddo ystod eang o asedau trwy Gymru, a data eithaf da arnynt sy'n darparu cnewyllyn da i adeiladu arno. Felly, os edrychwch ar safleoedd SSE, mae ganddo ddata da, felly mae'r fframwaith ganddo i wneud hyn. Rydym wedi cael trafodaethau lleol efo Chyfoeth Naturiol Cymru, ac rydym yn gweithio mewn partneriaeth â'r corff i symud ymlaen.

Mr Williams: I can respond only on behalf of the parks; we expect direction to be provided by Natural Resources Wales. It has a wide range of assets throughout Wales, and quite good data about them, which provides a strong core on which to build. So, if you look at SSE sites and so on, it has good data, so the framework is in place for it to do this. We have had local discussions with NRW, and we are working in partnership with it to move forward.

[42] **Lord Elis-Thomas:** Is that the view from local government, as well? I mean the rest of local government—I keep forgetting that national park authorities are, of course, part of local government.

[43] **Mr Rookes:** I would just like to add that NRW is ideally placed, when you consider that two of the three organisations that formed it—Environment Agency Wales and the Countryside Council for Wales—had a major part and a major interest in this before the NRW was formed. So, you are combining those two, and you have some of the knowledge and experience from the Forestry Commission, too. Those three corporate bodies have come together as one, and they have a certain amount of expertise. However, the overriding issue is that the only way that we are going to address invasive non-native species is in a co-ordinated way, involving all parties, whether the national park authorities, local authorities at a national level, or Environment Agency Wales—NRW now. We need to work together as a team to achieve, rather than saying, 'It is not our fault; it is your fault'. It is your opportunity.

[44] **Lord Elis-Thomas:** Julie Morgan is next, then Antoinette, Julie James and Mick.

[45] **Julie Morgan:** Thank you, Chair. Good morning. My question is a very general one. With the advent of climate change, when will species not be alien species? Do you have any views on that?

[46] **Mr Williams:** It depends on whether you are talking about climate shifting, or invasives. Climate shifting is a different concept, where species move with the changing

climates.

[47] **Julie Morgan:** Yes. That is what I am talking about, really, I think.

[48] **Mr Williams:** I do not think that we can argue a case for climate shifting with the Himalayan balsam, Japanese knotweed, or American mink. It is a pure invasive matter.

10.30 a.m.

[49] **Mr Rookes:** On the other hand, if there is climate shifting, you might be attracting even more non-native species, as opposed to the current invasive species becoming the norm, but at what expense to our native species would that be? I do not think that it is an acceptable approach to say, 'If we leave it long enough, these invasive non-native species will become the native species'. At what cost to the environment and to our current native species would that be?

[50] **Mr Hathaway:** We also need to consider not only the invasive species that could potentially come in, but our native species that will not be able to cope and will retreat north, and which, eventually, will not be able to cope at all. We need to think about those two things. It is the natives versus the non-natives, I suppose.

[51] **Ms Hodges:** It may be that some of these non-native species can be assimilated as climate shifts. We may find that some non-native species may be assimilated and become naturalised as part of our flora and fauna. However, there will undoubtedly be some that will develop the capacity to become invasive and, therefore, will present problems. They may outcompete other non-native species that may find a niche, and our native flora and fauna. It is interesting to note that, over the past few years, with a succession of mild winters, in the Pembrokeshire Coast National Park we are aware of bird species that never used to occur north of the Severn estuary becoming well established. They are finding a bit of climate space. Examples include the Little Egret, which is overwintering in considerable numbers in the national park, and it is also a breeding bird. So, there is a distinction to be made between those species that may extend their range further north and get into places where they are not found at the moment, and species that are both non-native and have the capacity to become invasive. As part of the horizon scanning, a better understanding of the implications for biodiversity and—I keep coming back to this point, but it is important that we also consider it—the economic aspects of this, which are crucial. We have already seen the significant impact that some of these invasive non-native species can have on infrastructure and on other economic assets, as well as on biodiversity. As part of the horizon scanning, we have to build into the system a clear risk assessment so that we are looking critically at some of these newcomers and assessing the risk that they pose. It is difficult to predict exactly who the winners and losers might be in terms of non-native species and climate change, but risk assessment needs to be built into horizon scanning—I apologise for the jargon—and the general surveillance and vigilance that we need to develop and maintain collectively across Wales.

[52] The other point that I would like to make in respect of marine invasive non-native species relates to biosecurity. Unfortunately for Wales and everybody else, this is a global problem that requires international solutions. There, I think, we might look towards Europe and a new directive to provide the framework, the impetus and the requirement placed on member states to work through these issues and to ensure that strict biosecurity is developed at ports, harbours and marinas and throughout the aquaculture and mariculture industries.

[53] **Antoinette Sandbach:** I want to pick up on the biosecurity point. Several years ago, I went to New Zealand, which is very hot on biosecurity. It seems to me that we are lacking that at airports and that there is little public information about the damage that invasive

species can do. It is easy to say ‘biosecurity’, but when you look at our coastline, it is also easy for a small boat carrying water from another part of the world to empty its bilge or whatever they do. What practical steps do you think we can take here in Wales to improve our biosecurity?

[54] **Ms Hodges:** One of the starting points would be to raise awareness. By that, I mean not just among the shipping fraternity and the commercial aspect, but by thinking in particular about recreational boating, as that is one of the main pathways for moving species around, as well as ballast water. I have been aware that the International Maritime Organisation has been looking at this issue for some time on behalf of the United Nations, through its GloBallast initiative, although that obviously requires the involvement of many Governments around the world—any member state in the European Union or a state outside of it—involved in international shipping trade. It requires a collective solution to regulate and to devise ways by which ballast water can be disposed of safely. This is because, of course, it works two ways. Ballast water can be taken up in British waters. So, we export, potentially, as well as import.

[55] There is that level, but it goes right the way down to the local marinas and raising awareness among recreational boat owners, because it could be something as simple as them not cleaning their hulls as regularly as commercial shipping would. You are quite capable of moving through foulant and getting it on the hull—there are all sorts of things around. So, I think it starts at home, in the local marinas, with awareness raising and a rigorous education of all our recreational boat users.

[56] **Antoinette Sandbach:** I would like to ask you, Emyr Williams, about the possibility of including invasive alien species under Glastir, to have an element of Glastir tackling that. I certainly know what a huge problem Himalayan balsam is in north Wales—it is everywhere now.

[57] **Mr Williams:** We have been successful as a park authority in working with the Welsh Government to include rhododendron as a targeted element in Glastir. What has not come through yet is how effective that has been in allowing rhododendron to be tackled on a farm-by-farm level. If it is totally discretionary for the farmer, then you might have pockets being treated and pockets not been treated. You might have management prescriptions on a wider Glastir farm that is de-intensifying stock, which may then allow rhododendron to re-invade. So, there has to be a holistic approach. This is why we have piloted our thinking through writing a strategy for rhododendron. One thing that became clear was that you need somebody to co-ordinate that effort, because it is very difficult for the farmer to be lumbered with that problem. It is slightly unfair on the farmer to be lumbered with that problem, because it has come to his land from somewhere else. The problem may be that Glastir can fund only the land occupier, but if another model could be found under Glastir, in which invasive species such as rhododendron, knotweed or mink, or whatever, could be tackled by a third party, through Glastir, with the farmer allowing access to facilitate that, it could strengthen the control of invasive species.

[58] **Julie James:** That leads nicely on to my question, which Sean alluded to—I am from Swansea, by the way, so I am very well aware of the blight of Japanese knotweed. I drove through acres of it this morning on my way here, speaking of biosecurity.

[59] What do you think we should do about landowners or people who are responsible for allowing invasive species on their land or to escape from their land? Is there some scheme that you would like to see? We have economic devastation in parts of south Wales because you cannot get a mortgage and cannot borrow on land, but we have no way of doing anything about the private landlords or privately owned land that is housing invasive species at the moment. Forgive me, I do not know whether that is the case for the marine environment, but it is certainly the case on land. Should the Crown Estate or someone like that have some sort

of responsibility as well?

[60] **Mr Hathaway:** May I answer that? It is a big issue in relation to private land—from someone’s back garden to the land of the big landowners, such as the owners of the Beaufort estate, who have a lot of land. We all know that, in the case of knotweed, at the moment, it is not strictly illegal to have it growing on your land, but that does not stop it from causing big problems for people. There is the mortgage issue, which has been mentioned, and there is the issue of it spreading into the wild again. The legislation is not particularly helpful because no-one knows what ‘the wild’ is, for a start. So, we need some proper legislation.

[61] The Wildlife and Countryside Act 1981 refers to ‘the wild’; some people say that country parks are in the wild, but it could also be in the middle of the city. Some people could say that the top of Snowdonia is the wild, but, because there are sheep on it, you could say that it is being grazed and, if it is being grazed, it is being managed and, if it is being managed, potentially it is not ‘the wild’. That is one big thing that we need to sort out. At the moment—

[62] **Lord Elis-Thomas:** I think that it is probably wild. [*Laughter.*]

[63] **Mr Hathaway:** Legally, it has not been broached at all, so nobody would be quite sure, in a court of law, what ‘the wild’ may or may not mean. There was one prosecution in Swansea under the Wildlife and Countryside Act of a farmer who was dumping waste, which happened to have knotweed in it, in the wild, but it has not gone any further than that. So, there is uncertainty as to the role of local authorities, landowners and private gardeners. There is an issue in the case of tenants. Is the landlord or the tenant responsible? It is not fair for the tenant—whether a private or a council tenant—to be responsible for that knotweed issue if, perhaps, it was there when they moved in. The same is true with industrial sites. We have many industrial sites with knotweed and, in Caerphilly, there are hogweed sites as well. However, I am not sure who will make the decision as to who is the responsible party, because it is not really that simple. Sometimes, you can have a bit of knotweed on one piece of land and there may be knotweed on the other side of the fence. It might be pretty impossible to prove from which side of the fence it spread.

[64] **William Powell:** I would like to ask a question of our colleagues from the Welsh Local Government Association. There have been a number of references to the blighting of sites and difficulties with mortgage finance, and so on. Has the presence of Japanese knotweed and other invasive species been a factor in the construction of the local development plan in terms of screening sites so that there are zones that are deemed to be so badly affected that they are not credibly going to come forward in a plan period? I understood that developers are not likely to choose to bring forward sites in their own land banks, but has that been a consideration from a forward planning perspective?

[65] **Mr Griffiths:** Yes, in short; for both forward planning and reactive planning. Many authorities are now bringing in, from the development control side, a specific policy condition for planning applications. However, your question is more related to the period prior to developments and consents. Sites are screened by officers in Caerphilly—I cannot say whether this is the case across the board in all authorities—for the presence of invasive species. Officers are supposed to look for balsam and hogweed as well, but, in reality, Japanese knotweed is the most obvious one to spot. So, sites are screened for that and landowners are made aware of its presence if it is there. It is also, as part of the LDP monitoring process in Caerphilly, one of our monitoring targets. So, we go out; Gethin monitors sites and the removal of knotweed from sites on an annual basis. Therefore, it is tied into the LDP from that point of view. Does that answer your question?

[66] **William Powell:** That is helpful. Is that also the case in Swansea’s experience?

10.45 a.m.

[67] **Mr Hathaway:** It is. In Swansea, we have had a planning condition for Japanese knotweed since, probably, the late 1990s. So, basically, I check the weekly list and put a knotweed condition on applications where I know there is knotweed, which range in number between 20 and 80 a year. Over the last several years, due to the recession, fewer planning applications have come in. That puts the onus on the developer to draw up an acceptable method statement, which, if suitable and will work, I can sign-off for the planner.

[68] Some local authorities may not have such a condition, and other local authorities may have a blanket condition on every application. The problem is whether they have someone who can read the method statement to decide whether it will work. We have had examples where people have said, 'We'll come back and spray around it in the middle of winter', which does not work at all—it has to be during the summer months when it is alive. That is quite a useful tool that we have had for a long time.

[69] We have also put a condition on planning applications where there are other non-native flora as in the Wildlife and Countryside Act 1981, which includes around 25 or 30 species. A good recent example of that is for Swansea City Football Club training ground, which had knotweed, balsam, cacosmia and a couple of other ones, which they dealt with. So, it does work.

[70] If developers have a clear site, they are happy to move in to start work. If you are buying land that is blighted with knotweed or whatever it may be, you have a two-way process where you would perhaps offer a lesser price for that piece of land. Alternatively, if you have a land bank and you are not going to sell it for several years, you have a long time to take the less expensive option of chemical control, as opposed to getting in some of the big contractors who can deal with it onsite, rather than take it to landfill.

[71] So, developers can use that as an advantage. If they have an issue with a site that is blighted, they could potentially offer less money. It can also be a way out for the seller if they cannot sell a piece of land with knotweed, because they may be prepared to sell it for less.

[72] **William Powell:** Do you feel that the forthcoming planning Bill could usefully address this issue in some way to assist in combating these invasive species and their impacts on the wider process?

[73] **Mr Rookes:** It could be a useful tool in that Bill, and in the environment Bill and the sustainable development Bill that is due to come out towards the end of the year. Those three Bills should be working together to ensure that there is an overlap and that nothing falls between the stools, so to speak. It would be useful for this committee to feed into the development of those forthcoming Bills so that we can start to address this issue.

[74] **Mick Antoniw:** In terms of what the overall objective of the strategy is, is it eradication or containment? It sounds to me as if it is a 'fingers in the dyke' situation, where you deal with one area, you sort it out, you go somewhere else and the contamination comes back, and so on. What is the current state of the strategy?

[75] **Mr Bowes:** If we had unlimited resources, it would be eradication, but because resources are limited, at the last count we had about 1,200 Japanese knotweed sites alone under treatment. The sites treated back in 2005 show really good results and they are monitored biannually. It goes back to the point I made earlier that you might not get any new growth in years 4, 5 or 6, but there might be some in year 7—you are not really sure. There is a big issue about rhizome viability, in that no-one is really sure how long the rhizome remains

viable in the ground after the plant stops producing new growth. We have sites that have been knotweed-free for three or four seasons, but I probably would not want to bet my life that the rhizome was not viable any longer. It is really difficult to know. If you had the resources, eradication could be a possibility in certain areas. In some of our sub-valleys, we have treated from the source, from the head of the catchment down, so those areas should not be re-infested unless there is illegal soil movement or movement of contaminated soils. So, eventually, they should stay knotweed free.

[76] **Mick Antoniw:** There are a number of options in terms of creating responsibilities to achieve something. One would be a publicly funded strategy or whatever. However, on the basis that there might be legislation issues in terms of the planning Bill, and there might be a directive from Europe that will have certain obligations, although we might be unclear about how they would translate to local responsibilities, should it not ultimately be the responsibility and duty of landowners to monitor and report and, ultimately, to deal with this? How might you go about creating such a duty?

[77] **Lord Elis-Thomas:** You can tell that he is a lawyer. [*Laughter.*]

[78] **Mr Rookes:** It will be difficult. I will give you an illustration: Cardiff Council undertakes a regular Japanese knotweed removal programme in the area that you can see as you look out from the Assembly buildings to where the Taff and Ely rivers feed into Cardiff bay. To quote the 2011-12 figures, something like 2,000 sq m of Japanese knotweed were removed from that area, as it was in previous years. I can demonstrate the viability of Japanese knotweed by saying that if something like a 2 cm piece of it comes floating down the river, the moment it finds solid ground, it can start to infest. So, if a landowner is targeted—dare I use that word—to control it, then, in this case, the landowner is Cardiff Council, yet the source of the problem is somewhere further up the catchment area of the Taff and Ely rivers. I am almost reiterating the statement that I made at the beginning—we need to have a totally holistic approach in that everybody recognises that they have a responsibility. The Wildlife and Countryside Act 1981 makes it an offence to allow it to grow in the wild, but it is only a public nuisance—not a statutory nuisance—when it infects an area. So, your hands are tied at the moment, because it is not in statute.

[79] **Mick Antoniw:** So, would you be in favour of the creation of a duty to report, provided that there was a mechanism for accepting and making use of the information? I suppose the next question is this: would that assist in developing a more coherent strategy for dealing with problems of invasive species?

[80] **Mr Rookes:** Swansea has undertaken comprehensive monitoring and has an understanding of the Japanese knotweed problem. However, on an all-Wales basis, you could not honestly say that there is a uniform, concerted approach; in some parts there is not even an approach. We have four local record centres throughout Wales; in particular, Cofnod in north Wales holds something like over 2,000 records of Japanese knotweed locations in the north. However, it does not do anything with that information. It is available for people to access or to supply information into it, but there is nothing being done at that centre, or at any of those centres, to enable people to say, ‘This is the size of the problem’.

[81] The actual monitoring and reporting is done almost on a voluntary basis. So, just because there are areas in north Wales that have not, at the moment, recorded the presence of Japanese knotweed, it does not mean that it is not there; it is just that nobody has bothered to volunteer that information. In order to have the approach that you are suggesting, we need to have a uniform monitoring system, within which people are obliged to report. You will then probably understand the size of the issue. I do not know whether the size of the issue in Swansea is because Sean is doing such a good job of monitoring it there compared with the monitoring that takes place elsewhere in Wales and the UK.

[82] **Mr Bowes:** I would suggest so, because our infestation is about 800,000 sq m, and it is plotted on the global positioning system with quite a lot of fine detail, but it is nowhere near as comprehensive. That situation would be replicated in our five partner authorities across the Heads of the Valleys, without a doubt, so it would probably end up being an infestation of millions of square metres.

[83] **Mick Antoniw:** In terms of the things that we could proactively recommend, until there is a consistent approach from the Welsh Government to develop consistency in obtaining information and in the accessibility and accuracy of information across Wales, it is almost impossible to have a consistent strategy for dealing with it. Is that a fair comment?

[84] **Mr Rookes:** In order to have a strategy, you will have to know the size of the problem. That is key. The other key and worrying factor is that the profile of Japanese knotweed is high compared with the awareness of the other species that Jane has mentioned. So, if you consider how poor the monitoring and recording system for Japanese knotweed is, you will know that the monitoring and recording system for many other species will be high on non-existent.

[85] **Llyr Huws Gruffydd:** Rydym wedi dechrau trafod y pwynt yr oeddwn eisiau ei godi, sef y cwestiwn hwn o ddiffyg data. Beth fydddech yn ei awgrymu a fyddai'n fodel addas ar gyfer sicrhau bod digonedd o ddata, yn gyntaf, ond wedyn sut fyddai orau i fynd ati i gydlynu'r data a sicrhau bod y cyfan yn cael ei fwydo i mewn? Cafodd cyfeiriad ei wneud yn gynharach ac mewn rhai rhannau o dystiolaeth at y drefn mai data sy'n cael eu cyflwyno'n wirfoddol yw'r rhannau helaethaf o'r data sydd gennym, os wyf yn deall yn iawn. Sut fydddech chi'n rhagweld y byddai'r system ddelfrydol yn gweithio pe bai modd cyllido neu ariannu system o'r fath?

Llyr Huws Gruffydd: We have started to discuss the point that I wanted to raise, which was this question of the lack of data. What would you suggest would be an appropriate model for ensuring that there is enough data, first, but then how best to co-ordinate those data and to ensure that everything is fed in? Reference was made earlier and in some of the pieces of evidence to the fact that voluntarily submitted data comprise the majority of the data that we have, if I understand it correctly. How would you foresee the ideal system working if it were possible to fund that kind of system?

[86] **Mr Williams:** Mae angen cael system o'r fath, ond cyn lluchio llawer o arian ati, mae angen rhoi tipyn bach o feddwl i beth yn union rydym eisiau ei ddal. Byddai'n rhaid i rywun benderfynu pa rywogaethau fyddai eisiau eu cofnodi. Fel staff y parciau cenedlaethol, rydym allan yn y maes, felly mae'n fater o hyfforddi staff y corff newydd a staff Glastir neu beth bynnag, fel bod pawb sy'n mynd allan i'r maes yn ymwybodol o'r agenda. Byddai hynny'n ddechrau da gan aildefnyddio'r adnoddau sydd gennym cyn dechrau rhywbeth newydd. Dyna'r pwynt cyntaf, sef penderfynu pa rywogaethau sy'n bwysig. Wedyn dylid codi ymwybyddiaeth staff, cael system unfurf ar draws Cymru i gofnodi hynny ac wedyn symud y dystiolaeth ymlaen i raglen.

Mr Williams: We need such a system, but before throwing a lot of money at it, we need to give a little thought to what information we want to hold. Someone would have to decide what sort of species would need to be recorded. As national parks staff, we are out in the field, so it is a matter of training the staff of the new body and of Glastir or whatever, so that everyone working out in the field is aware of the agenda. That would be a good start, reusing the resources that we already have before putting something in place. That is the first step, namely to decide which species are important. Following that, staff awareness should be raised, an uniform reporting system should be established throughout Wales and then the evidence should be progressed into a programme.

[87] **Yr Arglwydd Elis-Thomas:** Diolch **Lord Elis-Thomas:** I thank the panel for

i'r panel am roi agoriad rhagorol i ni o safbwynt maint y broblem. Medraf roi ymrwymiad i chi, fel Cadeirydd, y byddwn yn adrodd i'r Cynulliad ac yn gofyn am ymateb Llywodraeth Cymru ar hyd y llinellau sydd wedi cael eu hawgrymu. Diolch yn fawr i chi.

giving us an excellent opening with regard to the magnitude of the problem. I can give you a commitment, as a Chair, that we will report to the Assembly and ask for the Welsh Government's response on the lines that have been suggested. Thank you very much.

*Gohiriwyd y cyfarfod rhwng 11.00 a.m. a 11.09 a.m.
The meeting adjourned between 11.00 a.m. and 11.09 a.m.*

Ymchwiliad i Rywogaethau Goresgynol Estron—Tystiolaeth gan Cyswllt Amgylchedd Cymru

Inquiry into Invasive Alien Species—Evidence from Wales Environment Link

[88] **Lord Elis-Thomas:** It is my pleasure now to welcome Nigel from Wildlife Trusts Wales.

[89] Croeso arbennig i Nigel Ajax-Lewis. A special welcome to Nigel Ajax-Lewis.

[90] We welcome your paper, which we have as an additional paper. Would you like to set out for us what kind of action the wildlife trusts in Wales have been involved with in relation to the area of policy that we are looking at today?

[91] **Mr Ajax-Lewis:** Yes. On the one hand, we have been recording all species, including invasive non-natives, along with the voluntary sector, and, on the other, undertaking the treatment on our sites. We manage more than 200 nature reserves, about a quarter of which are designated sites, including special areas of conservation and European Natura 2000 sites. I have listened to the evidence that has been given so far, and we have had a very similar experience, in that continuous vigilance and treatment is required, particularly in terms of Japanese knotweed, which you have heard a lot about. In our case, it takes anything up to about five years finally to eradicate it from a particular site, for that individual species. However, there are a host of other things. It is really a matter of needing to do it on a landscape scale when you come to other invasive species, like Himalayan balsam—I am sorry, botanists call it Indian balsam, to confuse the issue. You can have that from the top to the bottom of a catchment with seed being moved both in terms of how the plant is structured—it throws its seed around anyway, which is something that children like to play with when it comes into seed after flowering—and secondly, watercourses spread it around, down the catchment. So, you have a plant that has a mechanism that allows it to move very easily across seasons and, in the process, by clearing it in the middle of the catchment, you are pretty well wasting your time because the material would keep coming down.

[92] One of your colleagues visited one of our sites the week before last, and I was able to show Himalayan balsam, which is only an annual plant, so it is much easier to get rid of, in theory, than something like Japanese knotweed, which is a perennial plant. You can have around eight or nine times as much underground in terms of root material as there is above ground. However, in the case of Himalayan balsam, we have been weeding and hoeing it since your visit and we have more or less eradicated it on our own property, but we have the whole of the catchment uphill behind us from where we will get more seed material next year when the river floods. So, you have to start at the top and work down, exactly as you do for Japanese knotweed. Cardiff Council moves it with diggers because it is rhizome material that has come down the river, but, in fact, you need to start in the Brecon Beacons, just north of Merthyr, and clear from there down. Then, eventually, you will get rid of it. However, you must be talking about tens, if not hundreds, of millions of pounds over time to be able to do

that. It needs to be a strategic process, otherwise your initial investment is a waste of time if you are in the wrong place.

[93] **Lord Elis-Thomas:** One other point about your organisations in particular is that you have a strong volunteer base and membership support. Do you see that as being very important in mobilising action in this area?

[94] **Mr Ajax-Lewis:** Yes, it is. You will hear evidence from Natural Resources Wales—I have trouble with the name.

[95] **Lord Elis-Thomas:** We are all getting used to it slowly. It is more complicated when you start saying it in Welsh, because you have to remember that it is *cyfoeth* and not *adnoddau*.

11.15 a.m.

[96] **Mr Ajax-Lewis:** Indeed. Changing 500 or 600 e-mail addresses is no help, either. However, it has illustrated a number of local action groups. I am aware of one where North Wales Wildlife Trust is a major player, but that is what you need. Having defined the area, you know where you should be starting and in which direction you should travel to get the most effective control. You have a small number of examples in the back of your information pack.

[97] **Llyr Huws Gruffydd:** I will speak in English, because I am going to mention some of the evidence that you submitted. In relation to action to tackle invasive alien species, you say that there should be greater alignment between INS regulations across the different devolved countries, following the Scottish regulatory model. In fairness, I think that you are quoting from something else, so I do not know if you are in a position to elaborate on the model in Scotland, and how that could be something that we could follow.

[98] **Mr Ajax-Lewis:** It is very much an inclusive community effort. Scotland's system of land tenure is different to ours. One of the statements that I have put in at the bottom of the evidence—I apologise that, because of lack of time and too many commitments, I did not get this material to you in time, and to have had enough time to create it properly—

[99] **Lord Elis-Thomas:** It is all right—we have got it now; that is the important thing.

[100] **Mr Ajax-Lewis:** The key bit is land access. I do not know if local authorities have access to everyone's land, regardless, but if there was a legal right of access by authorised people to manage and eradicate invasive non-native/alien species, it would make a considerable difference. I have heard a lot of discussion about landowners, but there is an awful lot of land that no-one seems to own, or, if they do, they live in another country. Your ability to get hold of these people to get access is a problem.

[101] **Llyr Huws Gruffydd:** Would that make a fundamental difference, or are those examples few and far between?

[102] **Mr Ajax-Lewis:** Yes.

[103] **Llyr Huws Gruffydd:** Would having access to land make a fundamental difference?

[104] **Mr Ajax-Lewis:** Yes.

[105] **Llyr Huws Gruffydd:** Was that a recommendation by the Law Commission?

[106] **Mr Ajax-Lewis:** It was a recommendation in the Law Commission's review of species protection legislation, which has gone through, and it may or may not appear in future environmental legislation in Wales.

[107] **Julie James:** Hello, Nigel. I am the Member who visited one of your sites, and it was very interesting indeed. I am very interested in the strategic plan that you have just talked about. I live in Swansea, as I told you at the time, and the perennial problem of knotweed is an economic blight, as well as being a blight on the countryside in terms of the environment, biodiversity and all the rest of it. We have all of the problems that you have just described—about removing it from one place, just for it to come across the border and so on. If we were to recommend a duty on local authorities to have a strategic plan for their area in one of the Bills that the committee is about to look at, even if the land is not theirs, and we also address the issue of access to that land—I cannot address the issue of funding at this point—because local authorities can be given powers to do things called 'works in default', thereby doing the work themselves and land-charging the land so that you cannot sell it without paying the money back, might that go a little way to solving it? That does not solve the funding problem, because the local authority has to have enough money to do it in the first place, but I will come on to that.

[108] **Mr Ajax-Lewis:** I would have thought that it would go a long way. You can do it according to individual local authorities. Your plan needs to be catchment-based. Cardiff can have a plan, but if Rhondda Cynon Taff has a slightly different plan and it is upstream, and you have the Vale of Glamorgan—I am not quite sure, in looking around, if it is in people's constituencies or not—

[109] **Lord Elis-Thomas:** Vaughan is part Vale.

[110] **Vaughan Gething:** I will take it on the chin. [*Laughter.*]

[111] **Mr Ajax-Lewis:** I did a report for the Vale on protected road verges 12 or 13 years ago, and I photographed all the Japanese knotweed sites for the report. I did it two years ago, 10 years later, and photographed the same patches of Japanese knotweed within the rural areas. They are still there—they have not moved very far, but they are quite a lot thicker, in slightly bigger clumps. So, in some places, people are doing some work, but in others, they have the information, but have never got around to it. You need a strategic plan. I hate the phrase 'quick wins', but I suspect that, if you work on these invasive, non-native populations in unpopulated Wales, you can start reducing the number of squares on this top map for Wales for Japanese knotweed. As you can see, it covers the whole of Britain, so it is not just our problem. On the link between strategies, Wales has a long and entirely leaky border with our powerful eastern neighbour, or whatever it thinks it is—[*Laughter.*]—so you have all kinds of possibilities of things invading across a long distance, which is a problem, whereas you ought to be able to sort out things like giant hogweed, which is the map at the bottom of the page.

[112] I can illustrate that, and the problems that you have in terms of a new arrival; it probably covers everything that we have already said. A single plant appeared miraculously on the edge of Stormy Down in Bridgend county three years ago. Wildlife trust volunteers and staff noticed it when driving past—it was on a verge. They reported it to the local authority and to the then Environment Agency. They came back asking whether it was registered common land, did we know who had ownership and what we should do et cetera. In the first season, everybody fuffed about and did nothing. We went out and cut all the seed heads off it, so that it could not produce any more plants, we hoped. This annoyed two people who lived in two different houses fairly close by who thought that it was wonderfully statuesque and that we should not do anything with it. In the second year, there was the same sort of messing around. It was a perennial plant, so it did not go anywhere. Last year,

somebody, whether authorised or unauthorised, managed to herbicide it, and I checked whether there was any sign of it at all before coming here, the day before yesterday, and there was not. However, the plant arrived somehow; you need constant vigilance by people who know what they are looking at, because one of the issues is being able to identify the things. Secondly, having reported it, we still did not know whose land it was, apart from it being about 4m from the road. I should also say that, in terms of herbicide, the other problem is that you need people—unless they are as old as me; let me get this right: if you were born before 1960—who can use herbicides without having gone through a massive training programme and got certificates. If you were not born before then, you need to be trained to be able to do this activity.

[113] **Julie James:** So, we need some old, brave people; that is what you are saying.

[114] **Lord Elis-Thomas:** I am up for this, I think. [*Laughter.*]

[115] **William Powell:** How would you assess the effectiveness of what the Welsh Government has done in recent years to combat invasive species? If you could look particularly at the predecessor bodies to NRW, what would you identify as good practice that you would like to see developed further in the new body as it takes shape and tries to tackle this persistent problem?

[116] **Mr Ajax-Lewis:** It is about whether I know enough about everything that they have done. In the immediate recent past, we have been able to remove that blanketing thing from Holyhead harbour, a process that was run by the CCW contract and funded, in large part, by the Welsh Government through the ecosystem resilience and biodiversity funds, for the last bit of it. The key bit is that the arrival of that thing should not have happened in the first place. It was a boat that came from Ireland, anchored in Holyhead harbour and sat there for x years before, all of a sudden, they realised that this thing was creeping around all over the harbour. So, there is this problem, as Jane said earlier, about biosecurity in terms of what comes in and then just sits there doing nothing in particular.

[117] I am aware of the Environment Agency having done a lot of work on rivers and the various invasive non-native species in them. However, I have already illustrated the problem to you in that because, within a catchment, generally, the direction of travel for most things is downstream, either through erosion in terms of bits of root being taken downstream, ending up somewhere further down and re-growing, or the seed travelling as well, I am not entirely sure how effective they have been in eradicating the species completely from the system. They have been throwing an awful lot of money at this issue for some time, as and when it has become available. I am fairly sure that the giant hogweed in the Usk catchment has been hit fairly effectively, even from what I have seen in terms of publicity material involving a previous Minister for the environment; I seem to remember seeing her spraying in that area—whether she had been trained as well, I am not entirely sure. [*Laughter.*]

[118] **Lord Elis-Thomas:** I would not go there if I were you.

[119] **Julie Morgan:** I am struck by you saying that you saw this one item on the side of the road. It seems that there is huge issue related to education. What do you, as an organisation, do to provide education, and at what level is that education provided? How do you think that the other agencies involved are dealing with increasing knowledge?

[120] **Mr Ajax-Lewis:** There are six wildlife trusts in Wales, which cover the entire country. One of our main activities for the general public and our members is to provide talks, walks and training courses on specific subjects throughout the year. In terms of guided walks and taking people out into the countryside, both on and off our properties, my organisation runs just over 300 guided walks a year; I would think that the other five do at least that, if not

more. In terms of showing these things, we also co-operate with recording societies like the Botanical Society of the British Isles et cetera in terms of providing training. There have been displays in the National Museum Wales and here to try to inform people. However, whether one is getting to the people who need to know is a different matter.

[121] I drove here this morning, and I happened to be a passenger in a car that passed here yesterday, and I counted what I think were 18 patches of Japanese knotweed on the side of the road on the west-bound carriageway and a nineteenth on the central reservation with the leaves still coming up. There were—I hate to think—about four or five working groups of contractors clearing vegetation on the motorway embankment. At this point, they are not disturbing soils, which is where the Japanese knotweed root will be, so that it will still be there and will not have been shifted by whatever they are doing.

[122] It is about constant vigilance, but the problem is that everybody needs to know what these species look like. We have only been talking about two species specifically. Last week, we showed Julie James some Himalayan balsam. At a two-leaf stage it is fairly obvious what it looks like, but it is about whether everybody knows that. Himalayan balsam is easy to get hold of, but it grows to something that is about 2m high with pink flowers, which is the point at which most people will identify it. It is considered to be the heaviest annual plant—wet weight—in Britain, at several tens of thousands of tonnes, apparently, across the UK as a whole. However, it is only an annual plant and its seeds do not last long. As long as you can keep it clear and stop it ever flowering in an area, and as long as you do not have seed arriving constantly, you should be able to get rid of it.

11.30 a.m.

[123] However, to go back to Japanese knotweed, you have this iceberg of a plant where you have to use a systemic herbicide, hopefully at the end of the season—possibly in the middle of the season and at the end of the season—when it is taking everything back into its root system. Local authorities talked about it taking three years. It has taken us five years to eradicate it in the two places where we have managed to eradicate it on our own property, and then we will just keep going. It is always associated with roads, so you quietly wonder whether there is a certain amount of accidental tipping—I say ‘accidental’, but it is deliberate—by people who do not necessarily know that they have plant material that can then grow into a monster in the future.

[124] **Julie Morgan:** So, you would do all that you can to ensure that your volunteers can recognise these. What about other agencies? Do you think that more education could be given by the Welsh Government?

[125] **Mr Ajax-Lewis:** I would think so. I would put something in. It is a long time since I have been to school, but as I understand it, biodiversity is now part of the Welsh curriculum. There are three key things that are endangering our biodiversity, and I should say that this is according to the UN Convention on Biological Diversity that we all signed up to in Rio in 1992: habitat fragmentation, invasive non-native species and climate change. Those are the three headliners. So, it ought to be on the curriculum, so that, at least from school level up, people will know about it. But, if you are a school child, on the one hand, Japanese knotweed produces very nice pea shooters, and you can fire the seeds of the Himalayan balsam at your friends. They will be quite happy to chop it down, but they will have thrown the seed around first, I suspect.

[126] **Llyr Huws Gruffydd:** If we are talking about a huge upscaling in terms of identifying and treating some of these plants, and looking at using some chemicals to do that, is there an issue that could emerge later down the line, in terms of the chemicals that are being used and the scale on which they will be used?

[127] **Mr Ajax-Lewis:** As I understand it, there are concerns about systemic herbicides, particularly glyphosate, which is a chemical that is most effective, it would appear, on this particular species. I do not know whether there are other less damaging chemicals in the pipeline to replace it. Otherwise, I do know one or two individuals who have actually removed it from near their properties by digging it up continuously until it went, including a friend, in his first house in lower Swansea, who had a disused railway line at the back of his house. He was taking it out of the railway embankment and down about 2m into his garden, but he did not get rid of it. However, that showed a certain level of determination and it was good physical exercise. [*Laughter.*]

[128] **Russell George:** I am interested in what experience you have of how other countries, particularly European countries, deal with the issue.

[129] **Mr Ajax-Lewis:** I do not think that I have any experience at all at a European level; I am trying to think of some. I spent three days with conservation officers from 14 countries in March.

[130] **Russell George:** What about countries such as Ireland or France? Do you have any experience to offer as to how those countries are tackling the issue?

[131] **Mr Ajax-Lewis:** I am trying to think in terms of species, because we have at least communication with Ireland with regard to the importation of mostly marine stuff to Wales for biosecurity purposes. But, I do not know what the situation is there. There is enough Japanese knotweed in north Wales, let alone anywhere else. I do not have any experience of those things at all.

[132] **Russell George:** No, that is fine. It would have been useful for the committee to pick up on another area's experience.

[133] **Mr Ajax-Lewis:** Yes. Having spent a reasonable amount of time in France, I could imagine that the climate does not favour it, particularly from the mid to the south of the country, because it is too dry. The key bit about Japanese knotweed in its normal range, which is obviously Japan, but not in the northern island of Hokkaido, which is one of the three large islands in the string of Japan, is that it is a relatively small woodland plant and grows with trilliums and skunk cabbage. If you happen to be a gardener you will know that this is another invasive plant for this country, particularly in the catchment area around Margam, because it is now breaking out of Margam country park. Hokkaido's climate means that it has 163 days of zero or sub-zero temperatures. Japanese knotweed always disappears in winter because immediately when you get a zero temperature it dies back and disappears. That is what is controlling it. The terrifying thing about Hokkaido is that it is on the same latitude as northern Spain, but on the other side of Asia. So, if you can imagine somewhere that is that cold as opposed to what the climate of northern Spain is—

[134] **Russell George:** In terms of decreasing the spread, we have talked about the issue in terms of once the problem is there, but how do we address the issue of the plant spreading in the first place?

[135] **Mr Ajax-Lewis:** It is a crime to move it about. It is an offence if you are talking about Japanese knotweed. That came in in 1981 and has been upgraded. I think that the real problem is that it was mostly shifted prior to that. The first records for it in the Glamorgan countryside were in the 1890s. That was in Maesteg. It had come out of a colliery owner's garden. The problem was that we introduced it. Britain had an empire and we went around the world taking our wildlife to other countries. New Zealand never had any mammals for a start, apart from two bats, naturally, but those were all. If we wanted to have tea at 4 p.m. and be

able to listen to a blackbird, regardless of whether we were in Australia, India or Canada and so on, we took the wildlife with us. That is what we did.

[136] **Russell George:** I was not thinking of planned spread. You talked about it being on road verges, for example, and vehicles carrying it and so forth.

[137] **Mr Ajax-Lewis:** In terms of Himalayan balsam and the seed dispersal, you will find it travelling uphill with vehicle movements when it is on the road verge. How on earth the giant hogweed appeared as a single plant in the middle of nowhere, I have no idea. With Japanese knotweed, it is mostly rising root material that is coming down catchments or it happens with almost any civil engineering activity if they have not identified whether the plant is there or not.

[138] **Russell George:** Are the relevant council staff, for example, highways people, in your experience, generally aware of the issues or not?

[139] **Mr Ajax-Lewis:** I have a suspicion that they are not aware. I am sure that they have been told about the issue; however, whether they know what they are looking at is an entirely different matter. You could have Japanese knotweed as a plant and at various stages of growing, and they may not know what the roots look like or what it looks like depending on what time of year they are working on a site. So, in deep winter, with nothing available on the surface, they would not know what they were digging up and how they would be required to dispose of it.

[140] **Russell George:** I would have thought that this is a significant issue. These are council officers and people dealing with highways issues who do not know what they are looking for and are not aware of relevant matters such as the time of year and so on. This is probably a large part of reducing the issue, I would have thought.

[141] **Mr Ajax-Lewis:** Yes, in terms of continuing to move it about. However, our problem is that we have got it just about everywhere.

[142] **Antoinette Sandbach:** Do you think that enough research is being done into biological control? I know that I am going to pronounce this wrong, but Swansea has been trying psyllids. Is there a natural biological predator for Himalayan balsam and the other invasive species? Should we be looking at that or would we be importing a biological problem as well, as it were? Do you think that there is enough research on that?

[143] **Mr Ajax-Lewis:** It takes a very long time to sort out the research on necessary control mechanisms, be it predator or herbivore, in the country of origin of the plant—we are mostly talking about non-native plants at this point—and then test it in this country to check that it will not have an effect on us or our biodiversity, to check that it will not go berserk if you let it out of the box, as it were. They have started an experimental process in Swansea to see whether using psyllids knocks back knotweed. It must have taken 7 or 10 years to get to the point of it being introduced. It will be x years longer, I suspect, before we decide whether it has been that effective.

[144] It would be nice if there were good fixes. There is a reasonable amount of research going on, as far as I can make out, in terms of the published literature coming through, about trying to look at various ways of controlling these things. On the basis that I do not know what is going on, we need more communication, as has been asked for, in terms of how people are dealing with these species in other places. I wonder whether everyone has quite the same problem that we have in terms of the massive amount of it that has spread everywhere—I am talking about knotweed—or whether they have other species that they have other problems with.

[145] **Antoinette Sandbach:** What would you like to see prioritised? We have the trial in Swansea, but I do not know how widely shared are the outcomes of that.

[146] **Mr Ajax-Lewis:** The Wales biodiversity partnership has an invasive non-native group that has been trying to work with others—some of whom will be sat behind me—to work out a priority list. First, it wants to knock off some of the easy ones, or the ones we think we can sort out permanently, but then, it will get to the really big issues. Going back to the discussion we had on this side of the table, it is about creating defined areas where, whatever the species concerned, it is not thought that it would be able to spread out of—a catchment area for the plants we have been talking about. It could work down that list systematically. It would also be able to think, for instance, Cardiff city and Cardiff bay are spending x amount of money moving all this material that comes down the river, but if the rest of the local authorities had cleared it upstream, then their cost would be reduced. So, the whole thing needs to be funded by everybody—across political areas and all the rest of it.

[147] **Lord Elis-Thomas:** I think that you are pointing us in a ‘Woe, you must travel’ direction on this one.

[148] **Mr Ajax-Lewis:** It is important to remember that there are hundreds of these different sorts of things from marine molluscs—the cost to Cardiff bay for clearing zebra mussels, wherever on earth they came from, from their lock gates so that shipping can go in all directions—to grey squirrels endangering the native red squirrel population.

[149] **Lord Elis-Thomas:** I have an arrangement with my neighbour with regard to the grey squirrel, but we are not going to go into that this morning or I will be in trouble again. *[Laughter.]*

11.44 a.m.

**Ymchwiliad i Rywogaethau Goresgynnol Estron—Tystiolaeth gan Undeb
Amaethwyr Cymru ac NFU Cymru
Inquiry into Invasive Alien Species—Evidence from Farmers' Union of Wales
and NFU Cymru**

[150] **Yr Arglwydd Elis-Thomas:** Rydym yn troi rwan at y gymuned amaethyddol a'i chynrychiolwyr. Mae'n bleser eich gwahodd i'r bwrdd.

Lord Elis-Thomas: We turn now to the agricultural community and its representatives. It is my pleasure to invite you to the table.

11.45 a.m.

[151] Croeso yn ôl i chi, Dafydd Jarrett, a chroeso, Andrew Gurney. A oes rhywbeth yr oeddech eisiau ei ychwanegu at eich tystiolaeth ysgrifenedig, neu ei danlinellu'n arbennig, Dafydd, cyn i'r pwyllgor ddechrau ar ein cwestiynau?

Welcome back, Dafydd Jarrett, and welcome, Andrew Gurney. Is there anything that you would like to add to your written evidence, or to underline in particular, Dafydd, before the committee starts on our questions?

[152] **Mr Jarrett:** Byddaf yn gwneud hyn yn ddwyieithog, os yw hynny'n iawn. Diolch i chi am y gwahoddiad i ddod i'r pwyllgor. Rwy'n falch iawn o ddod iddo bob amser. Yn wahanol iawn i amseroedd blaenorol, mae lot

Mr Jarrett: I will be doing this bilingually, if that is okay. Thank you for inviting me to appear before the committee. I am always pleased to attend the committee. Unlike on previous occasions, many of the people

o'r bobl sy'n rhoi tystiolaeth yn gytûn bod angen gwneud rhywbeth am y broblem hon. Rwy'n falch iawn bod y pwyllgor yn cydnabod bod problem a gobeithio y gallwn ni symud ymlaen o hynny.

providing evidence are agreed that something must be done about this problem. I am very pleased that the committee recognises that there is a problem and I hope that we can progress from that point.

[153] Rwyf wedi amlinellu amryw o bethau yn fy nhystiolaeth. Os bydd y pwyllgor am ddod yn ôl i mi ar unrhyw beth yn y dystiolaeth, gwnewch hynny. Yr unig beth y byddwn i'n ei ddweud nad yw wedi cael ei ddweud heddiw yw bod manteision o gael planhigion gwahanol—a diolch i chi am gael y cyfarfod yng Ngardd Fotaneg Genedlaethol Cymru gyda'i blanhigion gwahanol. Nid yw popeth yn mynd i achosi problem a rhaid inni gydnabod hynny fel rhan o'r dystiolaeth. Nid yw popeth yn mynd i achosi problem.

I have outlined a number of things in my evidence. If the committee would like to question me about anything in the evidence, please do so. The only thing I would say that has not been said today is that there are benefits to having a variety of plants—and thank you for holding the meeting in the National Botanic Garden of Wales, which has a variety of plants. Not everything is going to cause problems and we have to recognise that as part of the evidence. Not everything is going to be problematic.

[154] Mae pwynt arall yr hoffwn ei wneud. Heddiw rydym wedi sôn llawer hyd yma am fys y saethwr a Jac y neidiwr—sef yr Himalayan balsam—sy'n bwysig, ond mae'r pwnc llawer yn fwy eang na hynny. Mae pethau eraill sy'n effeithio ar y diwydiant amaeth yn arbennig. Felly, os ydym ni eisiau cynhyrchu mwy o fwyd o'r un faint o dir, mae'n rhaid inni reoli pethau sy'n mynd i effeithio ar hynny. Petai'r pwyllgor hwn wedi'i gynnal 15 mlynedd yn ôl, nid wyf yn siŵr os byddai unrhyw un fan hyn wedi clywed llawer am Jac y neidiwr ond, fel y dywedodd Antoinette yn gynharach, mae cynnydd sylweddol wedi bod. Er enghraifft, ym Metws-y-Coed, nid oedd yn bosibl i gerdded ar ochr yr afon yn yr haf, ond os ewch chi yno yn awr nid oes unrhyw beth yno. Mae'r peth yn anhygoel a dweud y gwir. Mae'n rhaid inni gydnabod hynny.

There is another point that I would like to make. We have spoken a lot so far about Himalayan balsam, which is important, but the issue is far broader than that. There are other things that have an impact on the agricultural industry in particular. Therefore, if we want to produce more food from the same amount of land, we have to manage things that will affect that. Had this committee been held 15 years ago, I am not sure whether anyone here would have heard much about Himalayan balsam, but, as Antoinette said earlier, there has been a substantial increase. For example, in Betws-y-Coed, it was not possible to walk along the riverbank in the summer, but, if you go there now, there is nothing there. It is quite incredible really. We have to recognise that.

[155] Mae pwynt pedwar yn bwynt pwysig iawn. Mae saith pwynt yn y gyfarwydddeb fframwaith ar gyfer rhywogaethau anffrodorol.

Point four is a very important point. There are seven points in the non-native species framework directive.

[156] They are prevention, early detection, mitigation, awareness, legislative framework, research and information exchange and integration.

[157] Dyna'r saith pwynt yr ydym yn meddwl sy'n hynod o bwysig. Rwyf wedi gwneud pwynt arall, ac fe wnâi ddweud hynny'n Saesneg: 'A *stich in time*' a '*hit it early, hit it hard*'.

We feel that those seven points are very important. I have made another point: 'A *stich in time*' and '*hit it early, hit it hard*'.

[158] Os na fyddwn yn gwneud hynny, byddwn mewn trafferthion. Ni chlywais dystiolaeth yr awdurdodau parciau cenedlaethol yn gyfan gwbl. Fodd bynnag, nid wyf yn cytuno yn llwyr ar eu strategaeth ar rododendrons, yn yr ystyr o ganolbwyntio ar y llefydd gwaethaf i ddechrau. Fy marn i yw y byddai'n haws i gychwyn o'r tu allan am y tu mewn a hitio'r darnau bach lle mae'r rhododendrons yn cychwyn rwan. Roeddwn i'n agor ffos dros y penwythnos a nid oedd gennyf syniad bod un planhigyn rhododendron yno, er nad oedd rhododendron arall o fewn milltir. Nid yw'r rhododendron yno rwan, ond dyna'r fath beth y byddwch yn hitio, felly. Unwaith yr ydych yn gadael i rywbeth gychwyn, nid yn unig y mae'n gostus—rydym wedi clywed y ffigwr o 50c y metr sgwâr a byddwn yn cytuno â hynny, ond mewn termau amaethyddol, mae'n £5,000 yr hectar, sy'n swm anferthol, i reoli'r rhywogaethau hyn. Fodd bynnag, os medrwch chi hitio'r un planhigyn cyn i bethau cychwyn, rydych chi'n mynd i arbed miloedd os na filiynau o bunnoedd yn y pen draw. Mae hynny'n hollbwysig. Mae *prevention* ac *early detection* yn hanfodol.

If we fail to do so, we will be in trouble. I did not hear the national parks authorities' evidence in its entirety. However, I do not entirely agree with their rhododendron strategy, in the sense of concentrating on the worst-affected areas first. In my opinion, it would be easier to start from the outside and work inwards and hit the small patches where rhododendrons are just taking hold. I was opening up a ditch over the weekend and I had no idea that there was a rhododendron there, although there was not another rhododendron within a mile. That rhododendron is no longer there, but that is the kind of thing that you would hit. Once you let something get a hold, not only is it expensive—we have heard the figure of 50p per square metre and I would agree with that, but, in agricultural terms, it is £5,000 per hectare, which is a massive sum, to manage these species. However, if you can hit that single plant before things take hold, you will save thousands if not millions of pounds at the end of the day. That is very important. Prevention and early detection are crucial.

[159] Fel y gwyddoch, mae posibilrwydd y daw deddfwriaeth o Frwsel. Rwyf wedi cynnwys pwyntiau 1 i 7 o dan bwynt 7 yn fy mhapur. Dyna'r hyn sy'n debygol o ddigwydd. Buaswn yn cytuno â llawer o hynny, ond nid ydym, o angenrheidrwydd, yn cytuno bod eisiau deddfwriaeth bellach. Ein hofn ni gyda hynny yw y buasai'n rhoi goblygiad ar dirfeddiannwr i reoli, gyda'r costau sydd ynghlwm wrth hynny. Fel sydd wedi cael ei ddweud eisoes heddiw, nid y tirfeddiannwr, o reidrwydd, yw'r un sydd wedi achosi'r broblem.

As you will know, there might be legislation coming out of Brussels. I have included points 1 to 7 under point 7 in my paper. That is what is likely to happen. We would agree with much of that, but we do not necessarily agree that further legislation is required. Our fear with that is that it would place an obligation on landowners to manage, and there are costs attached to that. As has already been said today, it is not necessarily the landowner who has caused the problem.

[160] O ran *catchment farming*, rwy'n meddwl bod angen gwthio am y rheolaeth honno. Yn aml iawn, er nid o reidrwydd, maent yn dilyn afon. Mae angen strategaeth sy'n edrych ar ardal gyfan, neu waeth i chi heb ddechrau ar dim byd.

In terms of catchment farming, I think that you need to push for that control. Very often, although not necessarily, they will follow the course of rivers. You need a strategy that looks at an area as a whole, or you will not take anything forward.

[161] Fel ple i orffen, rwyf wedi ysgrifennu yn fy mhapur:

As a plea, in conclusion, I have written in my paper:

[162] 'Invasion does not respect boundaries'.

[163] Ni wyddoch i le yr aiff unwaith iddo You do not know where it will go once it has

gychwyn.

taken hold.

[164] Fy mhle arall i chi fel pwyllgor yw: rwyf wedi sôn am y ddwy rywogaeth hynny, ond mae problemau eraill. Mae'n rhaid ichi fod yn hynod ofalus wrth ganolbwyntio ar rai pethau nad ydych yn colli pethau eraill. Mae angen i ni watsiad hynny.

My other plea to you as a committee is: I have mentioned those two species, but there are other problems. You have to be very careful that, in concentrating on certain things, you are not missing others. We need to keep a close eye on that.

[165] Mae gennyf rai pwyntiau eraill, ac efallai y byddent yn dod i fyny yn ystod y drafodaeth, ond fe wnaif roi siawns i Andrew ddweud gair.

I have some other points, and perhaps they will come up in the discussion, but I will give Andrew a chance to say a few words.

[166] **Mr Gurney:** Thank you for the opportunity to attend the committee today. As Dafydd said, the fact that the committee is looking at this issue is very welcome. It is becoming more prevalent as time goes on. We have heard about the increase in the number of areas that have Japanese knotweed and the Himalayan balsam in Wales. There seems to be work going on and we have heard examples of the work going on in Wales already, but it seems to be localised, contained work. It seems to be having a real benefit, but it is perhaps time that more was done on a wider scale to combat the wider issues.

[167] Dafydd mentioned seeds and material being transported down rivers. Perhaps it is time to start to look, not necessarily at tackling the problem where it is now, but where it originates, which might be from land further upstream. The gentleman giving evidence earlier mentioned contractors moving soil around during civil engineering works. It is those sorts of actions that need to be looked at. In terms of landowners and farming, they do try to stop the spread of invasive species. In fact, under the cross-compliance regulations, one of the breaches is to cause the spread of invasive species, so landowners and farmers are involved in this work on their own properties to stop it spreading on their land or onto neighbouring farms and properties, and onto public land. It is a very difficult problem that needs to be tackled at source. You can tackle it when it is 2m high, but it is better to tackle it before it starts to grow, or in its early growth stages before it spreads too far.

[168] **Yr Arglwydd Elis-Thomas:** Hoffwn ofyn i'r ddau ohonoch, cyn imi agor y drafodaeth ymhellach, os oes cytundeb bod swyddogaeth arbennig o briodol i Gyfoeth Naturiol Cymru i arwain yn y cyfeiriad yma?

Lord Elis-Thomas: I would like to ask both of you before I open up the discussion, whether there is agreement that there is an especially appropriate duty for Natural Resources Wales to lead in this direction?

[169] **Mr Jarrett:** Gan fod y tri chorff wedi'u huno, mae'n gyfle ardderchog na fyddem am ei golli. Mae gen i ddiddordeb mawr i glywed beth fydd gan Nick a'i gyfaill i'w ddweud wedyn. Dyna fyddem yn teimlo yw'r ffordd ymlaen yn bendant.

Mr Jarrett: Given that the three bodies have merged, there is an excellent opportunity that should not be missed. I will be very interested to hear what Nick and his colleague have to say later. We feel that that is certainly the way forward.

[170] **Lord Elis-Thomas:** Would that be your view as well?

[171] **Mr Gurney:** Yes, definitely. It also provides it with an opportunity to work with local authorities to get coverage across the whole of Wales, not just within the sites that the NRW is taking on, but within local authorities. The work could also branch out to trunk road agencies, Network Rail, et cetera.

[172] **Mr Jarrett:** I ychwanegu at hynny, **Mr Jarrett:** To add to that, Andrew has

mae Andrew wedi sôn am drawsgydymffurfio. Mae'n sôn am *Japanese knotweed* a *giant hogweed*, ond mae problemau eraill. Mae *giant hogweed* yn broblem achos nid yw'n blanhigyn neis iawn i ddelio ag ef—mae'n achosi pob math o broblemau, felly mae'n rhaid cofio hynny. Mae pethau y gall y Llywodraeth eu gwneud hefyd. Rydym wedi awgrymu y gallai lefel uwch Glastir gynnwys tâl tuag at reolaeth, gan nad oes dim i'w gael ar lefel Ewrop. Pe baech yn cael pwyntiau am reoli rhywogaethau, byddai hynny'n sicr yn rhywbeth i chi ei ystyried. Yn y cynllun datblygu gwledig sy'n dod, mae gennych brosiectau LEADER. Fel mae Antoinette wedi sôn yn barod, pam na fedrwch chi edrych ar reolaeth o wahanol bryfetach o dan y cynllun LEADER? Rwy'n siŵr bod cyfle i gael arian o'r fan honno.

mentioned cross-compliance. He talks about Japanese knotweed and giant hogweed in particular, but there are other issues. Giant hogweed is a problem because it is not a particularly pleasant to deal with—it causes all sorts of problems, and we need to bear that in mind. There are also things that the Government could do. We have suggested that the higher level of Glastir could include a payment towards management, as there is no such funding at a European level. If there was a points system for managing species, that would certainly be something worth considering. In the proposed rural development plan, you have LEADER projects. As Antoinette has already mentioned, why could you not look at the management with various bio-approaches under the LEADER scheme? I am sure that there are funding opportunities in that regard.

[173] Y peth arall o ran ariannu—achos rwy'n gwybod y bydd hyn yn broblem—yw bod gennym *aggregates funding*, er enghraifft, yng Nghymru. A yw'n bosibl sianelu arian tuag at hyn drwy'r arian hwnnw, achos mae'n mynd i helpu'r gymuned gyfan, a dyna yw pwrpas yr *aggregates fund*?

The other thing in terms of funding—as I know that this will be a problem—is that we have aggregates funding, for instance, in Wales. Is it possible to channel funding for this through that money, as it goes to help the whole community, and that is the purpose of the aggregates fund?

[174] **Yr Arglwydd Elis-Thomas:** Mae pob man yng Nghymru o fewn pum milltir i chwarel, fwy neu lai. [*Chwerthin.*]

Lord Elis-Thomas: Everywhere in Wales is within five miles of a quarry, more or less. [*Laughter.*]

[175] **Mr Jarrett:** Yn sicr yn Blaenau.

Mr Jarrett: Certainly in Blaenau.

[176] **William Powell:** Your last contribution addresses one of the things that I wanted to bring up, because we have heard reference to Glastir, which, by its very nature, does not cover all farms, and farmers opt in at the basic level or are invited to go in at an advanced level. That is not the holistic approach that many have called for. Do you consider that some of the management prescriptions that come with Glastir, such as the lower intensity of grazing and the fencing-off and creation of hardwood woodlands, could potentially aggravate the problem from its current state? Do you consider that it would be useful if there was a training programme for Glastir project officers to raise their awareness of invasive species, beyond what they currently have as their skills set to help to avoid that problem?

[177] **Mr Jarrett:** That is a very good point, and I make reference to this in the evidence; thank you for raising it, because I think it is a hugely important point. We are not necessarily against fencing-off waters, but you create opportunities for invasive species to spread. So, the management of that land has to change, and that management might have to include earlier identification of invasive species and their control. Doing it through Glastir would be good. It will work provided that the uptake of Glastir is high enough. I keep saying that 2014 is the critical year for Glastir, when we will see how many go in. If we get a good intake, we can get good coverage of Wales, and the control of invasive species could potentially be part of that. Before then, when the scheme is amended, if points could be obtained to control invasive

species, then that would be a win-win situation for everyone. It helps people who are getting into the scheme and it helps the control of invasive species. So, it is a very good point. Management has to change and improve once you fence off some of these areas, from what it was in the past. Early identification is very important.

12.00 p.m.

[178] **Mr Gurney:** Yes, I completely agree. There is a real danger that, in carrying out some works that would benefit watercourses et cetera, you could cause problems down the line that were not envisaged, not necessarily on that holding, but further downstream.

[179] **William Powell:** Do you consider that there might be a role for Farming Connect to run a series of events or some sort of information campaign? With all the other challenges that farmers have been facing, particularly in the last nine to 12 months but also more generally, this is not necessarily as high up the awareness agenda as perhaps it should be, given the dangers that we have been hearing about this morning.

[180] **Mr Jarrett:** My experience with Farming Connect—it does some excellent work—is that it can get its points over in more ways than one. One way to do it, when there is an on-farm event that has anything to do with farming, would be to have the control of invasive species as part of the package. That is a better way than having specific events about control. People might not come to those, but you would have a captive audience if they were already there. That is the way that I would go.

[181] **William Powell:** Yes, to maximise attendance.

[182] **Vaughan Gething:** It has been interesting to hear from a number of different witnesses. I am thinking about how you get to a solution. Lots of people have spoken about needing a strategic approach and, ultimately, lots of what we do comes down to either public authorities having a duty to act or public money being used to incentivise people to act, potentially with the law as a back-up or a punishment for people when things go wrong. Julie James made some comments earlier, and building on what you have said about the possibility for Glastir to have a more positive duty, regarding the general point about landowners managing and taking responsibility for their land, if we were to suggest imposing a further duty on local authorities about how they manage and co-ordinate action on invasive species, whether it is NRW taking a lead role or not, are you or would you be supportive of private landowners having a duty to co-operate with those people? That is regardless of where this comes from, because we have heard already that a landowner may not be in control of what comes onto their land, but if there is a duty to deal with it, would you support a local authority having the right to access land to undertake action to tackle invasive species if the landowner does not take action?

[183] **Mr Gurney:** Working with local authorities to tackle the problem would be a welcome step forward. It could be said that local authorities should look at their own land in the first place to solve the problem on public land as well, before they start looking at private land. The one concern that I would have would be with any costs associated with local authorities coming onto private land, as to whether that would create a cost burden for farmers in addition to the potential for them be put forward as breaching cross-compliance. I mentioned earlier that farmers, under cross-compliance, have to control the spread of invasive species on their land, so there is a real danger that the costs could be put back on the farmer. The last year or so has not been great for farming. We heard earlier that it costs about £5,000 a hectare to carry out works. It would be more favourable if there were schemes through Glastir to do works, but they would be limited only to those who want to take up the scheme.

[184] **Vaughan Gething:** The problem is if you limit it to people opting into a scheme—we

have heard already that you might not start with public land, because you may need to deal with an issue on private land in terms of the way that invasive species spread. I appreciate that collaboration may be the preferred option, but if there is no collaboration, do you think that there should be a power to undertake work and to have a right to access land to undertake that work? Otherwise, it seems to me that we are saying, ‘If we can’t get everyone to agree, we can’t do anything’.

[185] **Mr Jarrett:** No, that is going a step too far, from our point of view, even though I would perhaps partly support you in that. If local authorities identify a problem on a farm and point that problem out to the farmer for him to take action, then that is fine, but to go in and do the work and perhaps bill the farmer, no, we would not accept that.

[186] **Vaughan Gething:** So, if the local authority identified a problem and said, ‘This is where this species is spreading from. We know that there is a problem on your land. We would you like you to deal with it’, and if, say, there was a period of time within which a farmer had not taken action, or any landowner—it is not just about farmers; there are plenty of others, and it could be Margam Park, for example—would you then be supportive, having had a period of time to remedy the problem, of a local authority being entitled to have access to undertake work?

[187] **Mr Jarrett:** No, we would not support local authorities undertaking work, but we would support looking at the whole area and encouraging farmers to do the work.

[188] **Vaughan Gething:** Encouraging, but not requiring.

[189] **Mr Jarrett:** Not requiring, no.

[190] **Vaughan Gething:** That is clear.

[191] **Mr Gurney:** It would also depend on how long that period of time is, because these invasive species are not something that can be dealt with overnight or in a 12-month programme; it takes time to deal with them. If we have weather like this—it is rainy at the moment—then over a year, weed-killing, treatment and that sort of thing will not be as successful as it would be in a drier period.

[192] **Vaughan Gething:** I am interested in the point of principle, though. Do you oppose this as a point of principle, or are you saying that there needs to be a reasonable timescale for people to take action? They are two different points. If you say, as a point of principle, that you do not want, under any circumstances, a requirement, then that is different to saying that, actually, you would need a reasonable timescale for a private landowner, whoever that landowner is, to take action to start remedying a problem.

[193] **Mr Jarrett:** I stick to my previous answer.

[194] **Vaughan Gething:** I think that you are saying that it is a point of principle, but I think that Andrew is saying that it is about a reasonable timescale, and they are two different positions.

[195] **Mr Gurney:** I completely agree with Dafydd that access to carry out works would be unacceptable, but you mentioned a reasonable timescale before they have access; it would depend on what that reasonable timescale is.

[196] **Julie James:** What would you do if somebody just would not do it?

[197] **Mr Jarrett:** If he is a single farm payment claimant now and he is not doing it, then

potentially he would be in breach of cross-compliance, and he would be penalised for that.

[198] **Lord Elis-Thomas:** I have Antoinette Sandbach next, but I will come back to you on that, Julie.

[199] **Julie James:** That is all right; it was just that single issue.

[200] **Antoinette Sandbach:** Dafydd, we heard a little bit about glyphosate earlier. A lot of these species are next-door to rivers. I understand that there is an issue around glyphosate and water, and you have to be quite careful about its application. Is there support to get training in how to use glyphosate? What does it cost? You have given us a cost per hectare; I do not know if you could give us a cost per acre, because somebody has to come on to an area of land and deal with a corridor or section of it. Could you give us a cost?

[201] **Mr Jarrett:** I cannot give you a specific cost, but certainly if you are talking about the cost of doing the whole job for some of these badly infested areas, it would be at least £2,000 per hectare, and perhaps more. As I said, I have controlled Japanese knotweed myself, and it is not easy. You can normally control it within 12 months. You raise an important point, and something that worries me—it is being looked at in Europe at the moment—is the issue of using glyphosates near water, because it gets into the water. I think it is a pretty safe chemical, but I am not an expert—it is very much in the hands of the chemical regulation directorate. However, the point is that, if we lose the ability to use glyphosate near water, we are losing the ability to control a lot of these invasive species. Nigel referred to the issue of new chemicals. As far as I am aware, there are no new chemicals on the way that could be used. If there were, they would cost a lot to develop, and whether the market would be big enough is open to question. So, I come back to the biological control, and the need to do work on biological control is even more urgent now than it ever has been.

[202] Perhaps the committee needs to be aware that Japanese knotweed has been around for a few years—I used to use it as a pea-shooter, so it must have been around for a few years—and the point is that it is spread by rhizomes. It has seeds, but they are sterile at the moment. However, if climate change makes conditions warmer and warmer, those seeds might become fertile. God help us if that happens with Japanese knotweed, because it will become a real issue. It is a big issue now, but it will be a worse issue then. Let us act before that happens.

[203] **Antoinette Sandbach:** I do not know whether Andrew wants to add to that.

[204] **Mr Gurney:** I do not think that there is much more that I can add, really, apart from what Dafydd said about Japanese knotweed rhizomes. If I remember rightly from the bits of reading I have done on that particular species, a two-inch section of rhizome is a viable amount to start growth in a new area. If it flows downstream or is transported in soil, that is a viable amount to start growing.

[205] **Antoinette Sandbach:** Dafydd, you spoke about the problem in Betws-y-Coed. Of course, I know that area well, as you know. We have a lot of walkers there, and there is a problem with Himalayan balsam; seeds get spread on people's shoes.

[206] **Mr Jarrett:** Yes, and by dogs in particular.

[207] **Antoinette Sandbach:** I am seeing it travel upriver, rather than downriver. How do you feel landowners could assist in that type of scenario, bearing in mind that the seed may be spread through public access?

[208] **Mr Jarrett:** I think that we need to control it much earlier in the year than we do now—it is possible—and make it easier to get permission to control it. Not only is it

spreading, if you look at the riverside in winter, the soil is bare, and that is adding to the diffuse pollution problem along the River Conwy and along other rivers. It is a different type of spread. In Welsh, it is called *Jac y neidiwr*, as it does jump. Not only does it spread downriver, it spreads upriver, as you said. More worryingly, however, it is spreading away from rivers. In Dolgellau, for example, where I work, it is on the river Wnion, but it is also now in Dolgellau town. You cannot see it now, but you will see it later in the year. So, we need to hit it, and to hit it much earlier in the year than we do now.

[209] **Mr Gurney:** Just one point on the Himalayan balsam. In Aberystwyth, which is where I am from, the CCW and some of the local wildlife volunteers, last year in particular, carried out work to clear Himalayan balsam from a number of sites along the River Rheidol. As far as I am aware, that was quite successful. Whether it has come back this year we do not know, but there was a big clear-up operation, if you want to call it that, to clear a lot of sites prior to it seeding. Whether they carried it out early enough in the year, I do not know, but they did a lot of work last year to try to clear sites there. That could be used as an example of good practice for other sites—I am not aware of the work that was done in Betws-y-Coed, but sites like that could perhaps be used as examples in other parts of Wales, as templates, to say, ‘We did it this way, and it has worked’.

[210] **Antoinette Sandbach:** Are you saying that you support voluntary co-operation where projects may be put forward and someone like NRW may go to a group of landowners and say, ‘We would like to run a series of projects’? That would be regardless of whether you are in Glastir, because it is much broader than Glastir.

12.15 p.m.

[211] **Mr Jarrett:** Indeed, but there must be a—[*Inaudible.*] In fairness, many voluntary organisations—and I include the wildlife trusts in this—do a good deal of good work, but some co-ordination is needed. If NRW is responsible for it now, it can identify the target areas and we will start there. However, unless we start there, we will have a huge problem, particularly with Himalayan balsam.

[212] **Russell George:** I asked a question in the last session about lessons that can be learned from other areas of the world, and I notice that, in your evidence, Dafydd, you talk about prevention and the lessons to be learned from New Zealand, Australia, the US and Canada. I am not sure whether you are just suggesting that those areas should be looked at, or whether you have experience that you can share with us on that.

[213] **Mr Jarrett:** The experience that I have comes from speaking to those who go to Australia, New Zealand, America and Canada, and the checks that you are required to go through in customs there. If you are carrying an apple, you are not allowed in. So, we need to look at that. That is what I am getting at there. However, I noted your question earlier and perhaps we need to look at other European examples of control, which, unfortunately, I do not have. The research paper does not, perhaps, cover that either. Perhaps that is something that we can look at if we can learn about control in other countries. I am talking about prevention there; that is, stopping things from coming in in the first place.

[214] **Russell George:** Could you expand on the UK border controls? Do you think that there is a role for the UK Government to extend those controls?

[215] **Mr Jarrett:** Yes, definitely. It is broader than just invasive species—if you will excuse me for broadening this out slightly. When people come into the UK, the checks are very lax compared with other countries. Obviously, it is not within the jurisdiction, necessarily, of the Welsh Government, but it is certainly within the jurisdiction of the UK Government.

[216] **Mr Gurney:** On that point, in the farming press last week, it was mentioned that Owen Paterson had just come back from a trip to New Zealand and Australia and that he had been looking at its border controls in terms of bringing in plants and animals. He was quoted as saying, when he came back—and I do not know whether this is in context, or not—that he would perhaps look at adopting some of their controls in this country to strengthen our border controls to reduce and prevent new species from coming in to the country. To back up what Dafydd has just said, that would be a very welcome move.

[217] **Mr Jarrett:** We do not know what the next invasive species will be. However, with climate change, we can be fairly sure that there will be another invasive species. If we can prevent them from coming in in the first place, then let us do that.

[218] **Russell George:** I think, Chair, that we are lacking is some evidence on how other European countries are dealing with the issue. Is that something that we can address?

[219] **Mr Jarrett:** I am sure that they are and that this is why Europe is considering legislation on it.

[220] **Lord Elis-Thomas:** Thank you, Andrew and diolch yn fawr, Dafydd Jarrett.

[221] **Mr Jarrett:** Thank you for the opportunity.

*Gohiriwyd y cyfarfod rhwng 12.19 p.m. a 12.24 p.m.
The meeting adjourned between 12.19 p.m. and 12.24 p.m*

**Ymchwiliad i Rywogaethau Goresgynnol Estron: Tystiolaeth gan Cyfoeth
Naturiol Cymru ac Ysgrifenyddiaeth y Rhywogaethau Estron
Inquiry into Invasive Alien Species: Evidence from Natural Resources Wales
and Non-native Species Secretariat**

[222] **Yr Arglwydd Elis-Thomas:** **Lord Elis-Thomas:** Good afternoon, once Prynghawn da, a chroeso i'r panel olaf yn ein again, and welcome to the final panel in our trafodaethau; diolch yn fawr am eich discussions; thank you very much for your presenoldeb a'ch papurau. attendance and papers.

[223] Perhaps we could start with the non-native species secretariat. Further to your paper, will you describe your relationships with colleagues in Natural Resources Wales and how the system works UK-wide?

[224] **Dr Moore:** Thank you, Chair, and thank you for inviting me to give evidence this morning. I head the non-native species secretariat. As I pointed out, it is very small; at one stage, people thought that we were as big as Biosecurity New Zealand, and we were getting criticised accordingly. As you know, New Zealand is well versed in biosecurity issues and has thousands of people in its agency. However, there are only 2.6 of us. [*Laughter.*] I hasten to add that I am one of those, so it is me plus 1.6 others. So, we are slightly smaller than Biosecurity New Zealand.

[225] We were established in 2006—seven years ago. We report to a programme board, which is chaired by DEFRA and has the Welsh Government, and now NRW, on it. The aim of the secretariat is to assist the board in co-ordinating action across government on non-native species. There was a review of policy in 2001-02 that found that there was a lot of work going on in relation to non-native species across Great Britain, so England, Scotland and Wales, not including Northern Ireland, but that it was not very strategic or co-ordinated

and that a small amount of co-ordinating activity would be really useful to stop the duplication of work that was going on between the administrations. That has proved to be pretty sensible. I was the one who wrote the paper that resulted in the establishment of the invasive non-native species group in Wales, in 2007, so my one colleague and I have been intimately involved with work in Wales since that date.

[226] **Lord Elis-Thomas:** So, you are a co-ordinating body rather than an advisory body, as well as being an implementation body to a degree.

[227] **Dr Moore:** We are in a tricky position. We do not make policy, but we advise on it and help to develop it, particularly in DEFRA. We attempt to get bits of government to talk to each other. If people think that government is joined up, they are not correct, or rather they are naive. So, even in an area like this, where a lot of people know each other, there are a lot of bits of work going on that lots of other people do not know about. So, a lot of wheel reinvention has gone on heretofore, and that is a waste of money. In the current climate, that is a luxury that we cannot afford.

[228] **Lord Elis-Thomas:** We see it as part of our role in this committee to make parts of the Welsh Government talk to each other. We have been successful recently, so we are going to carry on doing that. *[Laughter.]*

[229] This is the final question from me. You mentioned the potential for a European Union legislative instrument and made the point that the UK is well placed for a strategic response. Have you been involved in any of the pre-discussions on the content of the directive and, if so, can you tell us anything about what you think will be in it and what you would like to see in it?

[230] **Dr Moore:** The answer to the first question is ‘Yes, I have been involved’. I have been involved since about 2008, and I spent three and half months seconded to the Commission to the unit that is developing it—

[231] **Lord Elis-Thomas:** Oh, it was you.

[232] **Dr Moore:** Yes, it was. That was between October and January this year. So, that has given me a good insight into what is likely to arrive, but even when I left, they were not sure whether it was going to be a regulation or directive. They were edging towards a directive, but I am not so sure now. It was interesting to hear the worries about it imposing lots of issues on landowners, but I suspect that that will not be the case; it will clearly impose things on member states to act on. So, at an EU level, I think that there will be a blacklist of species, which will probably be relatively short, that you cannot import, keep, sell or release into the environment. There will probably also be an onus on member states to look at pathways, which is a key area. What are likely to turn up are monitoring implications and probably some things where you will have to rapidly respond or eradicate species that are of EU concern. So, I think that it will be a relatively small list of species that they will be looking at for that.

[233] **Yr Arglwydd Elis-Thomas:** Gwnaf droi at Nick a Joanne o Gyfoeth Naturiol Cymru a holi yn gyffredinol, yn y dyddiau cynnar hyn yn hanes y corff newydd, a ydych yn teimlo'n hyderus y gallwch gymryd rôl arweiniol mewn perthynas â'r hyn rydym yn ei drafod heddiw. Mae'n amlwg bod unoliaeth ymhlith y tystion rydym wedi eu cael yma mai cyfrifoldeb i'r corff newydd y dylai hynny fod. Felly, sut ydych yn gweld **Lord Elis-Thomas:** I will turn to Nick and Joanne from Natural Resources Wales and ask generally, in these early days of the new body, whether you feel confident to be able to take a lead role in relation to what we are discussing today. It is evident that there is unanimity among the witnesses that we have had here that that should be a responsibility for the new body. Therefore, how do you see that developing?

hynny'n datblygu?

[234] **Ms Sherwood:** Thank you for the opportunity to give evidence this afternoon. We have already heard that the Wales biodiversity partnership has a non-native invasive species group, which is chaired by a Welsh Government official at the moment, and we have members on that group. Could NRW be the lead body? We certainly have some expertise and we have had historic involvement, so we could be the lead body, but it is probably only one option and it would be useful to have a discussion about what the other options are, and we would be happy to contribute to that discussion.

12.30 p.m.

[235] One of the things that is clear is that one body on its own will not solve this particular issue. It is going to involve a lot of people working in partnership across both government-funded bodies and non-governmental organisations and probably at a wider UK level. One thing is to be really clear about the rules and responsibilities of each of the partners that are involved. Alongside that there is the question of funding. I think there was some discussion about that this morning. It will be a matter of how much funding is available for this and it is not just a lead body that needs to be funded—all the partners need to be funded otherwise the outcome will not be achieved.

[236] **Lord Elis-Thomas:** Do you see that there would be a significant opportunity for voluntary activity in this area as we seem to have identified earlier this morning?

[237] **Ms Sherwood:** Yes. There already is considerable voluntary activity in this area and that is one of the issues about data collection that I think has come up through our evidence. It is about collating the information that is already there. We had some discussion with the wildlife trusts and there are developments in this field all the time. For example, a new app has been developed for any of you who use modern iPhones and so on. If people are out and about and they have the skills to recognise these invasive species, they can put it on an app and it then gets collected. It is a question then of how that information gets shared among all the bodies that are responsible. So, yes, there is an element of volunteering. We have been successful in that with catchment approaches and we heard about some of them this morning.

[238] **Yr Arglwydd Elis-Thomas:** Oes gennych chi rywbeth penodol i'w ychwanegu, Nick? **Lord Elis-Thomas:** Do you have anything specific to add, Nick?

[239] **Mr Thomas:** Buaswn i'n dweud, Dafydd, bod gwirfoddolwyr yn hollbwysig i fynd i'r afael â hyn. Rydym wedi trafod lot y bore yma am y *catchment approach*, os liciwch chi. Mae hwnnw'n hollbwysig oherwydd nid oes pwynt, fel yr oedd Nigel yn cyfeirio ato'n gynharach, canolbwyntio ar un ardal ac, er enghraifft, i Gaerdydd wneud llawer o waith ar *knotweed* ac wedyn y sir nesaf i fyny'r cwm yn peidio â gwneud unrhyw beth amdano fe. Felly, rwy'n meddwl ei fod yn hollbwysig eich bod yn gorfod dechrau, mwy neu lai, ar ben y cwm a gweithio i lawr yr afon os ydych eisiau cael gwared â phethau fel *knotweed* a *balsam*. Mae'r un peth yn wir am lawer o'r planhigion hyn. Rhaid gweithio i lawr y cwm. Wrth **Mr Thomas:** I would say, Dafydd, that volunteers are crucially important in addressing this issue. We have discussed a great deal this morning about a catchment approach. That is crucially important because there is no point, as Nigel said earlier, in concentrating on one area and for Cardiff, for example, to do a lot of work on knotweed and then the next county up the valley not doing anything about it. So, I think that it is crucially important that you have to start more or less at the top of the valley and work your way down the river, if you want to eliminate plants such as knotweed and balsam. The same is true of a number of these plants. You have to work your way down the valley. Of course, voluntary organisations are

gwrs, mae mudiadau gwirfoddol yn bwysig. Pysgotwyr, yn enwedig, yw un o'r grwpiau pwysicaf yn hyn o beth byddwn i'n dweud. Yng ngogledd Cymru maen nhw wedi bod yn arwain gyda gwaith ar lan yr afon Dyfrdwy. Mae'n hollbwysig fod pysgotwyr a gwirfoddolwyr eraill yn dod ynghyd. Yn aml, rydych yn cael math o gymuned lle mae pobl yn gweld fod gymaint o broblem gyda rhai o'r planhigion hyn nes eu bod yn mynd allan eu hunain i wneud y gwaith. Beth sy'n bwysicach nag unrhyw beth arall yw bod strategaeth ar gael. Rwyf yn meddwl bod y gwaith mae Niall wedi ei wneud gyda chyn lleied o staff wedi bod yn rhagorol. Er hyn, rydym angen mwy o strategaeth yng Nghymru, oherwydd ar hyn o bryd, mae'r gwaith mor *patchy*. Mewn rhai llefydd mae pobl wedi gwneud lot fawr o ymdrech ond mae siroedd eraill sydd heb wneud unrhyw beth. Wrth gwrs, beth sy'n digwydd wedyn yw, er gwaetha'r ffaith eich bod wedi gwneud lot o waith mewn un lle, ei fod yn dal i ddod yn ôl o rywle arall. Felly, rwyf yn gweld y strategaeth hon yn bwysig iawn.

[240] **Llyr Huws Gruffydd:** Cyfoeth Naturiol Cymru, rydych yn dweud yn eich papur fod angen edrych ar *risk-based approach*. A allech chi ymhelaethu ychydig ynglŷn â beth yn union yr ydych yn ei feddwl wrth hynny? Sut mae hyn yn wahanol i'r *approach* presennol, os ydyw e? Gwnaf gychwyn gyda hynny.

[241] **Ms Sherwood:** It is fair to say that historically the approach of the bodies that came together to make up NRW were taking a risk-based approach to this issue. For example, it was focused on a site-by-site basis, looking to things such as the water framework directive, protected sites, the Welsh Government's forest estate and those areas where any impact from invasive species could have a big detrimental effect on the local or Welsh economy or access to river banks, and therefore some societal impact. That is the first thing. In terms of the risk-based approach, it is about identifying the threats. Not all non-native species will cause a big impact, so it is about being able to identify and understand the ones that will. Over and above that, once you have identified the ones that will have an impact, it is then about how big that impact will be and what is being impacted by it: is it an economic or a societal impact, and what might the solution be? I know that there was some discussion about that this morning. So, what, if anything, can be done?

[242] In terms of a hierarchy, it is very much about trying to prevent these things in the first instance, and then, if possible, to eradicate them in small areas. It is then about control and containment. There was a reference this morning, from colleagues in the farming community, to the fact that some of that control does take a long time. On the face of it, something might appear to have been eradicated, but it needs to be monitored and kept under surveillance for a longer period to make sure that it truly has gone. That is what we mean when we say 'risk-based approach'. However, I absolutely agree with Nick that, in the longer term, we need to

important. I would say that anglers, in particular, are one of the most important groups in this respect. In north Wales they have been leading the way with work on the banks of the river Dee. It is crucially important that anglers and other volunteers come together. Often, you will have a community that comes together where people identify that there is such a problem with some of these plants that they will go out to do the work themselves. What is even more important than anything else is that there is a strategy in place. I think that the work that Niall has done with so few members of staff has been truly excellent. Despite this, we need an enhanced strategy in Wales, because, at the moment, the work is so patchy. In certain areas, people have made a great deal of effort, but in other counties virtually nothing is being done. Of course, what happens then is that, although you have done a great deal of work in one area, it still invades from somewhere else. Therefore, I see this strategy as being crucially important.

Llyr Huws Gruffydd: Natural Resources Wales, in your paper you say that there is a need to look at a risk-based approach. Could you expand a little on what exactly you mean by that? How is that different to the current approach, if it is? I will start with that.

move towards a more strategic approach. Somebody has already mentioned looking to Europe and looking at what is coming over the horizon.

[243] **Llyr Huws Gruffydd:** Rwyf jyst eisiau deall yn well a ydych yn blaenoriaethu gwahanol fathau o risg. Sut ydych yn penderfynu bod risg economaidd mewn un sefyllfa yn fwy o flaenoriaeth na risg cymdeithasol neu amgylcheddol o safbwynt bioamrywiaeth ac yn y blaen? A oes rhyw fath o bwysio penodol ar gyfer gwahanol fathau o risg?

Llyr Huws Gruffydd: I just want to understand better whether you prioritise different types of risk. How do you decide that an economic risk in one situation is more of a priority than a social or environmental risk in terms of biodiversity and so on? Is there some kind of weighting for different kinds of risk?

[244] **Ms Sherwood:** It would be useful if Nick gave an example based around the Menai straits.

[245] **Mr Thomas:** Rydym yn gwybod beth yw'r 10 rhywogaeth waethaf. Mae rhestr o'r rhywogaethau sydd naill ai yn y wlad yn barod neu ar y ffordd. Rydych chi'n iawn fod yn rhaid edrych ar yr ochr economaidd a'r ochr ecolegol. Y prif beth yw atal y pethau hyn rhag dod mewn i'r wlad yn y lle cyntaf. Rydym wedi clywed lot y bore yma am *biosecurity* ac atal pethau mewn meysydd awyr ac yn y blaen. Mae hynny'n bwysig iawn.

Mr Thomas: We know what the 10 most invasive species are. There is a list of species that are either already in the country or have been identified as being on the way. You are right in terms of the need to look at it from an economic and ecological point of view. The main thing is to prevent these things from entering the country in the first place. We have heard a great deal this morning about biosecurity and security in airports and so on. That is very important.

[246] Ond, unwaith mae rhywbeth yn y wlad—ac, wrth gwrs, mae cymaint ohonynt yma'n barod—y prif beth yw penderfynu a ydych yn gallu gwneud rhywbeth am y peth. Weithiau, does dim byd y gallwch wneud—mae cymaint ohonynt yma'n barod nid oes llawer o bwynt gwneud unrhyw beth am rai ohonynt. Mae gwiwerod llwyd yn un enghraifft. Efallai drwy eu trapio a'u saethu mewn rhai llefydd y gallwn eu cadw o dan reolaeth, ond nid wyf yn meddwl y byddwn byth yn cael gwared arnynt.

However, once something has entered the country—of course, so many have done so already—the main thing is to decide whether the problem can be tackled. On occasion, there is absolutely nothing you can do—there are so many of them here already, there is no point in trying to tackle some of them. Grey squirrels are one example. Perhaps we could use trapping and shooting in certain areas to keep the population under control, but I do not think that we are ever going to eradicate the whole population.

[247] Mae'n wahanol gyda rhai rhywogaethau eraill, er enghraifft, y *Didemnum*, y *sea squirt*, sydd wedi landio yng Nghaergybi. Dyna'r unig lle yng Nghymru lle y mae ar hyn o bryd, yn ôl beth ni'n ei ddeall. Rydym wedi treulio cryn dipyn o amser yn trio cael gwared arno achos ein bod yn gwybod beth yw profiad gwledydd eraill. Mae'n broblem enfawr yn Seland Newydd. Felly, mae'n bwysig mynd mewn ar unwaith—fel dywedodd Dai yn gynharach, '*Hit it hard and hit it soon*'.

It is different with some other species, for example, the *Didemnum*, the sea squirt, which has landed at Holyhead. That is the only place in Wales where it has taken hold, as we understand it. We have spent a great deal of time trying to eradicate it because we know the experience of other countries. It is a huge problem in New Zealand. Therefore, it is important to get in there immediately—as Dai said earlier, '*Hit it hard and hit it soon*'.

[248] Mae'n dibynnu ar y rhywogaeth. It depends on the species. You need to

Rydych yn gorfod edrych ar beth allwch wneud. Mae *Dikerogammarus villosus*—*killer shrimp*—wedi landio fyny mewn cronfeydd dŵr yn ne Cymru. Eto, ni allwch gael gwared arno ond efallai y gallwch drïo ei gadw yn y llyn yn hytrach na gadael iddo ledu. Dyna pryd mae *risk assessment* yn bwysig. Rhaid edrych ar bob gwahanol rywogaeth a phenderfynu yn union beth rydych yn gallu gwneud.

[249] Y prif beth i'w gofio yw nad oes llawer o enghreifftiau da lle rydym wedi cael gwared ar bethau o'r wlad. Unwaith maen nhw mewn, mae'n job enfawr cael gwared arnynt. Yr unig beth allai feddwl amdano yw'r gwaith o drapio coipw yn nwyrain Lloegr—math o lygod enfawr o Dde America a oedd yn cael eu ffermio ar gyfer eu blew a wnaeth ddianc i'r afonydd yn nwyrain Lloegr. Ar ôl trapio am dros ddegawd a mwy, rydym wedi llwyddo i gael gwared arnynt. Unwaith maent allan, mae'n job enfawr stopio'r pethau hyn.

[250] **Llyr Huws Gruffydd:** Gwnaeth Dafydd Jarrett bwynt, gan gyfeirio at rododendron, na ddylai'r pwyslais fod ar fynd i'r afael â phethau lle maent ar eu gwaethaf o ran dwyster, yn hytrach dylech weithio o'r tu allan i mewn gan bigo *off* yr ardaloedd lle mae rhywbeth yn dechrau datblygu gyntaf. A yw hynny'n adlewyrchu eich polisi ar hyn o bryd, neu ai eich polisi yw trio mynd i'r afael â'r ardaloedd sy'n dioddef waethaf gyntaf?

[251] **Mr Thomas:** Mae gan Dai bwynt da, ond y drafferth yw gwybod lle maen nhw. Rydym yn gwybod bod lot o rododendron o gwmpas Beddgelert a ni'n gwybod bod lot yng nghoedwig Coed y Brenin gerllaw. Rwy'n siŵr bod cryn dipyn o gwmpas yr ardal hon. Fodd bynnag, nid ydych yn gwybod yn union lle mae rhododendron yn yr ardal honno. Mae strategaeth dda iawn wedi cael ei chyhoeddi gan y parc, ac rydym yn ymwybodol o'r prif leoedd. Mae'n job, mewn ffordd, i ddweud, 'Mae darn fan hyn, tynnwn ni hwn i fyny'. Os ydych yn mynd i roi adnoddau i mewn i'r peth, mae angen ei daclo lle mae llawer ohono. Yna, mae angen gwneud job o fopio i fyny. Efallai bod angen cael digon o hyfforddiant fel bod pobl yn

address the things that can be achieved. *Dikerogammarus villosus*—*killer shrimp*—have appeared in reservoirs in south Wales. Again, you cannot eradicate it but you can try to contain it in that reservoir, rather than let it spread. That is when risk assessment is important. You need to look at every species and decide exactly what can be done.

The main thing to bear in mind is that there are not many good examples where we have been able to eradicate species from the country. Once they are in, it is exceptionally difficult to eradicate them. The only thing I can think of is the work of trapping coypu in eastern England—huge rodent-like creatures from South America, farmed for their fur, which escaped into the river system in eastern England. After trapping for over a decade and more, we have managed to eradicate that population. Once they are out there, it is a huge challenge to stop these things.

Llyr Huws Gruffydd: Dafydd Jarrett made a point, referencing rhododendron, that the emphasis should not be on tackling things where they are at their worst and most intense; rather, you should work from the outside in by picking off the areas where it is starting to develop first. Does that reflect your current policy, or is it your policy to try to tackle the worst affected areas first?

Mr Thomas: Dafydd has a good point, but the difficulty is in knowing where these species are. We know that there is a lot of rhododendron around Beddgelert and we know that there is a great deal in Coed y Brenin forest nearby. I am sure that there is a considerable amount throughout that area. However, you simply do not know exactly where the rhododendron has taken hold in that area. An excellent strategy has been published by the park, and we know where the main areas are. It is a job, in a way, to say, 'We have an area here, we will dig it up'. If you are going to put resources into it, it has to be tackled in the areas where you know that there is a lot of it. It is then necessary to do a mop-up job. Perhaps there

gwybod sut mae'n edrych ac yna gallant ei farcio ar fapiau. Dywedodd ein cyfaill o Abertawe mai dyma'r math o beth maen nhw'n ei wneud. Mae'n hollbwysig bod hyfforddiant a phroses fel bod swyddogion yn gwneud hynny'n effeithiol.

should be adequate training so that people can identify it and can then mark its location on the map. As our colleague from Swansea said, this is the type of thing that they are doing there. It is crucial that training is in place and that there is a process in place so that officials do this effectively.

[252] **Julie Morgan:** I was interested in what Nick said about Cardiff doing a lot of work on knotweed but the next authority up not doing anything. Why are some authorities doing a lot on it while others are not? Is it to do with where it appears to be the most prolific?

[253] **Mr Thomas:** I suspect that it is partly economically driven. There has been a lot of redevelopment in Cardiff over the last few decades, but there is a lot of derelict land throughout the Valleys, which is perfect for Japanese knotweed, bearing in mind that it is a plant that grows in volcanoes. The fact that you are trying to redevelop large areas means that it automatically becomes a major problem. That is why Cardiff and Swansea have put so much effort into it. In the Valleys, there has been some redevelopment, but it has not, perhaps, been on the same scale as that in Cardiff and Swansea, so it may not have emerged as an economic problem. You would need to ask the authorities concerned, really.

[254] **Julie Morgan:** However, if that is the source, it is important that that is where the work is done, is it not?

[255] **Mr Thomas:** Yes, absolutely.

[256] **Julie Morgan:** Is there anything you can think of that would raise awareness in those authorities?

[257] **Ms Sherwood:** May I interrupt? There is a Heads of the Valleys project starting up, which will be working with local authorities across the Heads of the Valleys on knotweed. One of the issues, as we have already talked about, is finding where it is. One of the things that we have been trying to do is to look for different ways to detect some of these things. Getting people out on the ground to find them all the time is very labour intensive and it relies on volunteers and people recognising them and letting us know. However, developments such as remote sensing, where you can use satellite imagery, if it is taken at the right time of year, will allow local authorities to focus on those areas. However, that is a project that is in its early stages.

[258] **William Powell:** Joanne, you mentioned earlier the importance of volunteering in terms of project work to try to address this issue. Could you give us any specific examples that would be potential exemplars of good practice that you are aware of in this area?

[259] **Ms Sherwood:** I will ask Nick to do that, if that is okay, in terms of some of the examples from his previous position.

[260] **Mr Thomas:** There are a couple of examples. We put in some case studies for interest, really, in our response. So, there are some very good examples. One is from the River Alyn in the Mold area in north Wales, where Denbighshire and Flintshire councils, in conjunction with anglers and community groups, have been doing a major project involving working down the Alyn to try to get rid of Himalayan balsam. So, that has been really good. That was done with a combination of officials and the local community. That is a really good example.

[261] **William Powell:** Previously, when I was a member of the Brecon Beacons National

Park Authority, I had some engagement with some board members from the probation service who were looking at the possibility of engaging in a long-term, constructive way on projects that would be of benefit both to the community and their own clients. Do you think that a project of that kind would have any merit at a high level, to bring some consistency to things and also to address the issue of how labour intensive this work is, as Joanne has referenced previously?

[262] **Ms Sherwood:** That is certainly a very interesting suggestion, particularly because one of the objectives of Natural Resources Wales is to work more across the whole of the sustainable development agenda and to focus, in its first year, on urban communities. Examples like that are well worth exploring as we go forward.

12.45 p.m.

[263] **William Powell:** I am grateful; thank you.

[264] **Antoinette Sandbach:** I wondered whether you could expand on right of access. You indicated in your evidence that you would like to have a right of access to land in order to deal with these issues, but it seems to me that there are successful projects that are taking place on a voluntary basis. Would you not see a legislative right of access as being a last resort rather than a first resort?

[265] **Ms Sherwood:** One of the things that we suggest in our evidence is around the Law Commission's review of the wildlife legislation. Much of it has been around since the 1830s and was driven by very different needs to today's policy drivers. It did look at invasive non-native species, and what it proposed was a model akin to Scotland's. Scotland introduced legislation last year with a three-pronged approach to non-native invasive species. One was around having an emergency list for species; we have talked about this already, but the mechanisms to put something on the list involved their being consulted on, and it takes a long time. So, there was something to get them quickly on the list for a period of a year. The other one was the power to make orders to ask people to record species, and the third was asking people to take action where species were on their land—and that included where people were not willing to co-operate on the right of access. We support that as one potential approach. I would support the idea that a voluntary approach and working in partnership is far and away the best, but having said that, there are certain species that will escape, and if we look at the longer term economic impacts further into time, as opposed to trying to eradicate this and nip it in the bud, we do have to think seriously as part of the strategy in Wales about whether that might be an approach that Welsh Government would wish to take forward.

[266] **Mr Thomas:** Could I give an example? At the moment we are trying to work with a landowner who owns some land above Llyn Tegid, in Bala, and he has a pool on his land that has New Zealand stonecrop on it, which is a highly invasive species. It is pretty devastating—once it gets into ponds, it will just cover them over. He likes his pond. The main way of getting rid of it is, basically, to bury the pond. It is such a difficult thing to get rid of that you actually have to bury the pond. He is not prepared to do that. It is in a catchment that goes into Llyn Tegid, which has a unique ecology and feeds into the middle and lower Dee. At the moment, he is not prepared to do anything about it. It is a matter of time before that plant gets into Llyn Tegid, and further down the Dee, and we cannot do anything about it.

[267] **Yr Arglwydd Elis-Thomas:** Bydd **Lord Elis-Thomas:** We will have to think yn rhaid i ni feddwl am hynny. about that.

[268] **Dr Moore:** If I could just add to that, I definitely agree with the two speakers on my left: the Scottish approach, where they have a control order regime, is really important. They start off with a controlled agreement. They have not done any of these yet. They are trying to

do one at the moment for black-tailed prairie dogs, where they have had issues with them getting out of a zoo in Scotland. [*Laughter.*] There could be problems arising from that. First of all, they try to make an agreement with the landowner; if that does not work then the Minister can make a control order, and there is an emergency control order as well. It is a scaled approach, and initially involves consensual activity. I put in a submission to the Law Commission about a month ago, discussing the issues with the need for compulsory access or power of entry, and I was looking at water primrose. The Environment Agency is trying to eradicate water primrose now, and NRW will be doing it in Wales. There is one site in Wales, and 15, I think, throughout England and Wales. It is costing £100,000-plus, and there is one site where they cannot get access. I think that it is in England. Monk parakeets are the same; they are a big problem, and the person who may have released them—or they escaped from his garden—will not allow access to remove them. Ruddy ducks are the same, with £5 million potentially threatened by a lack of access. We have a contingency plan for Asian hornet; if this arrives in the UK, the plan is to wipe it out straight away. All that it would take is one landowner saying ‘No, I do not want you on my land’, and that would jeopardise the whole contingency response, and it would spread.

[269] **Lord Elis-Thomas:** Would you be able to share what you have given the Law Commission with us, or to give us a version of it?

[270] **Dr Moore:** Yes.

[271] **Lord Elis-Thomas:** That would be very helpful; thank you.

[272] **Julie James:** I just want to extend the point about absentee landlords. I had only heard the evidence earlier, and I am from Swansea, so one of the big problems that we have is Japanese knotweed. A lot of the problem is to do with land-banked land, or land where the ownership is not clear, so it might take a considerable amount of time. I know that Japanese knotweed is not the immediate problem that you are talking about, but it is nevertheless an endemic problem and a major economic blight in some parts of Swansea, in that we have whole areas of land sterilised for development and so on. How would that power work? Presumably, you would serve notice on the person you thought was the landowner and then you would be able to get access. Is that it?

[273] **Dr Moore:** Yes. The Scottish legislation—the Wildlife and Natural Environment (Scotland) Act 2011—is accompanied by a code of practice on the non-native species elements of it, and it certainly deals with this issue. I am not sure exactly how they deal with it. They have a six-week gap between the serving of the notice and the next step—I think that you can put a notice on the land, if you cannot find the actual landowner; that seems to me to be quite a sensible approach.

[274] **Lord Elis-Thomas:** I think that we are done. I will just ask you one general question. How would you rate the performance in Wales compared with the other areas of the United Kingdom with which you have dealings? Be frank. [*Laughter.*]

[275] **Dr Moore:** When I was asked the questions initially, I thought that Wales was probably lagging behind slightly. Actually, however, I am not so sure. When I started going through the actions that are taking place in Wales, with the support of the Welsh Government and its agencies, I realised that there is a hell of a lot going on. You could definitely always do more with a bit more co-ordination and some extra resources. I realised, for instance, that with the sika deer issue, which I mentioned, you are trying to eradicate them from Wales, which I think would be really good. It took a bit of cajoling to get the money out, and we went through something of a circuitous route. So, it would be nice if funds were available to look at that a bit more speedily.

[276] **Lord Elis-Thomas:** You mentioned that you have been involved in drafting, or that you had drafted, the paper that led to the setting up of the group that brings people together on this subject in Wales, so you are able to look back at what you proposed and how you assess it. Do you think that, in that sense, there has been a good response?

[277] **Dr Moore:** Yes, pretty well. It has got a lot of people together to discuss things strategically, but, yes, as you say, there is always more to do.

[278] **Lord Elis-Thomas:** However, you would recommend that we read Scottish legislation—which is something I am loath to do, because Scotland is another country. *[Laughter.]*

[279] **Dr Moore:** I think that the Scottish legislation has some elements that would definitely be extremely useful, and I will share with you the paper that I sent to the Law Commission.

[280] **Lord Elis-Thomas:** Thank you very much indeed—diolch yn fawr.

[281] Mae'n ddrwg gennyf am y dyn I am sorry about that man above Llyn
hwnnw uwchben Llyn Tegid—rhaid inni gael Tegid—we will have to discuss it later.
sgwrs wedyn. *[Chwerthin.]* *[Laughter.]*

[282] Cyn inni gau'r cyfarfod, diolchwn i'r Before we close the meeting, we thank the
ardd fotaneg am gael bod yma i gwrdd fel botanic garden for allowing us to meet here
pwyllgor, a diolch yn fawr i'r tystion. as a committee, and we thank the witnesses.

Daeth y cyfarfod i ben am 12.53 p.m.

The meeting ended at 12.53 p.m.