



Proceedings of the Fourth Stakeholder Forum on Non-native Species

Our Dynamic Earth, Edinburgh

3 May, 2007



SCOTTISH EXECUTIVE



Llywodraeth Cynulliad Cymru
Welsh Assembly Government

Introduction

The Fourth Stakeholder Forum on Non-native Species takes its direction from key recommendation 8 of the Working Group report of the Review of Non-native Species Policy – i.e. that stakeholders should be fully consulted and engaged in the development of invasive non-native species policies and action, through a mechanism such as a consultative Forum.

This year's Forum built upon the lessons from the Third Forum and used a mixture of talks and workshop sessions. The theme for the day's events was:

‘Taking the GB Framework Strategy forward together’

The Forum was designed to help with the consultation process on the GB Framework Strategy, as well as to inform how the strategy could be taken forward. In particular, the workshop sessions were designed to achieve stakeholder input into the process of developing four specific areas of the strategy, namely monitoring and surveillance, education and awareness, horizon scanning and climate change and legislative priorities. Building upon suggestions in the feedback from the 2006 Forum a short ‘Question & Answer’ session followed the report back from the workshops.

There were 82 attendees.

PROGRAMME

'Taking the GB Framework Strategy forward together'

10:00 Registration and coffee

10:30 Welcome and introduction (*Hilary Thompson - Programme Board Chair and Kim Fellows - SEERAD*)

Introduction to the programme

Update on progress since the 2006 Forum (*Niall Moore – GB Non-native species Secretariat*)

Presentations

10:50 Large-scale control – Managing the impacts of non-native mammal species in the Western Isles (*David MacIennan - Scottish Natural Heritage*)

11:10 Industry perspectives on the GB Framework Strategy (*Keith Davenport - OATA*)

11:30 NGO perspectives on the GB Framework Strategy (*Paul Walton - RSPB*)

11:50 Invasive species in Ireland: risk assessments, policy development and international cooperation (*Cathy Maguire – EnviroCentre*)

12:10 General discussion on the morning's talks

12:20 Introduction to the workshop sessions (*Niall Moore and Huw Thomas - Defra*)

12:30 Lunch (chance to mingle, view posters, visit Dynamic Earth)

Workshop sessions 13:30 – 14:30

- 1) Monitoring and surveillance
- 2) Education and awareness
- 3) Horizon scanning and climate change
- 4) Legislative priorities

14:30 Coffee break

14:50 Report back from workshops and discussion from the floor

15:20 Panel session (Q&A)

15:55 Closing remarks/next steps (*Hilary Thompson*)

16:00 Close

Progress since last Forum (May 2006 – May 2007)

Niall Moore, Secretary to the GB Programme Board, outlined the main areas of progress since the 2006 Forum. These are detailed below.

- The GB Non-native Species Secretariat, established in March 2006, now has a compliment of two staff members. Its website www.nonnativespecies.org was launched in February 2007.
- Public consultation on the GB Framework Strategy commenced on 28 February 2007 and closed on 23 May. All stakeholders were urged to respond.
- The Non-native Risk Analysis mechanism has been established, consisting of a Risk Analysis Panel (of four experts) with taxon experts to carry out the risk assessments. The current risk assessment methodology has been peer reviewed by RPS Group Ltd and the report is available on the Secretariat website: www.nonnativespecies.org/documents/Final_Peer_Review.pdf.
- Monitoring and surveillance – Defra is currently funding a scoping study to look at how best to establish a web portal for collating surveillance and monitoring information on non-native species in Britain. The final report is due to be submitted by the end of May 2007.
- **Control**
 - Rapid response:
 - The Programme Board has overseen (and Defra has funded) a control trial to remove the highly invasive water primrose *Ludwigia* from known sites in southern England - before it becomes established. The work, costing under £10,000, has been highly successful to date;
 - Natural England are attempting to eradicate a population of American Bullfrogs in southern England. This species is highly invasive and carries the chytrid fungus which is fatal to many amphibian species;
 - Both are examples of government-funded action that are saving environmental damage and money in the long term by acting now.
 - Ruddy duck eradication: the control programme is progressing extremely well – in 18 months duck numbers are down from 4,400 to approximately 900.
- **Legislation**
 - The NERC Act came into force (in England and Wales) on 1 October 2006. Its relevant provisions include the ability to prohibit the sale (or advertisement for sale) of specified non-native plant and animal species.
 - The Scottish Schedule 9/Section 14A (WCA) consultation was completed in February 2007. The feedback is currently being

considered and a Ministerial Order is expected later in the year. Consultation on proposals for England and Wales was expected later this year.

Presentations

The four talks helped set the scene for the afternoon workshops.

Abstracts of Talks

Large-scale control: managing the impacts of non-native mammal species in the Western Isles

David Maclennan, SNH.

Non-native mammal species have been a focus for conservation management in the Western Isles for some time. American mink escaped from fur-farms in Lewis in the late 1950s and spread throughout the Western Isles, reaching the Uists by 1990. The damage caused by mink to local biodiversity, aquaculture, agriculture and the economy stimulated a partnership approach to management - delivered through the Hebridean Mink Project, supported by EU LIFE Nature.

European hedgehogs have spread throughout the Western Isles since the 1970s, animals having been deliberately released in South Uist in 1974. Surveys of breeding waders in the Uists in 1983 and 1995 showed significant declines in wader populations, the declines being due to a range of factors but mainly predation by hedgehogs. The Uist Wader Project was established to investigate the causes behind the declines and measures to manage the problem.

David reflected upon progress and achievements to date, and shared lessons learned from the Western Isles that can be applied to problems with non-native species elsewhere in the UK.

Industry perspectives on the GB Framework Strategy

Keith Davenport, OATA.

The framework strategy document has been developed to facilitate progress in addressing the non-native species issue. We are currently inundated with consultations, proposals, framework plans, codes of practice and the like. So how can we make sure this one will bring about positive changes, and what changes do we want from whom and when?

The targets envisaged in the framework document can only ever be achieved by winning hearts and minds and thereby compliance. Enforcement might work in specific instances but in general terms will be impossible, unless we put the “non-native” equivalent of speed cameras on every hedgerow and by every stream.

Simple messages targeted at the widest audiences may achieve better long-term results in enabling the public and industry to help resolve a problem to which all sectors have contributed.

NGO perspectives on the GB Framework Strategy

Paul Walton, RSPB.

The non-native species issue presents unique and substantial challenges to legislators, policy makers and communicators. These must be met robustly and rapidly, with clear and short lines of responsibility, the best supporting information, sufficient resources and an adaptive precautionary approach. The GB strategy is our best opportunity to establish such provisions. Short-term economic and practical costs would be incurred, and these must be anticipated and prepared for. The long-term net environmental and economic benefits of success would be considerable, however. A pre-requisite will be the establishment of a shared appreciation of the general biological problems associated with non-native species introductions, and of their growing severity. An initial priority must be a fundamental revision of non-native species legislation in the amended Wildlife and Countryside Act. There is reason for cautious optimism: experience elsewhere suggests that well planned responses can be effective, and there are indications that public understanding and support for action is stronger than we imagine.

Invasive Species in Ireland: Risk Assessments, Policy Development and International Co-operation.

Cathy Maguire, EnviroCentre.

The island of Ireland is an example where a co-ordinated joint approach is needed to achieve effective management and prevention of species invasions. International co-operation between both jurisdictions is vital as there are protected sites which span the border, a need for a co-ordinated response to new invasions, and early eradication and management of existing invasive species.

In May 2006 a three-year project began to take forward the implementation of key recommendations from the 2004 review of Invasive Species in Ireland. The outputs of the project include 1) risk assessments, management strategies and exclusion/contingency plans; 2) rapid response facilitation; 3) a stakeholder engagement programme including development of codes of practice and development and delivery of education and awareness programmes; 4) a review and recommendation of monitoring, surveillance and recording programmes; 5) a review of legislative provisions and recommendations for improvement.

An overview of the progress to date will be presented. Plans currently under development have an emphasis on rapid practical action, eradication where feasible and stakeholder engagement in formulation and implementation. The need and opportunities for co-operation between the GB and Ireland projects will be highlighted given Britain's role as a major donor area of invasive species to Ireland.

Speaker profiles

Mr David MacLennan

david.maclennan@snh.gov.uk

David is the Scottish Natural Heritage Area Manager for the Western Isles. He started work with the Nature Conservancy Council in 1989, and has had an active role in the management of non-native species since the inception of the Harris and Lewis Mink Control Group in 1990 - an initiative that developed into the Hebridean Mink Project. David chaired the Hebridean Mink Project on behalf of SNH, and has also chaired the local management group for the Uist Wader Project since 2002.

Mr Keith Davenport

keith@ornamentalfish.org

Keith is Chief Executive of the Ornamental Aquatic Trade Association (OATA). OATA has 750 business members and represents their interests locally, nationally, to Brussels and internationally. In a working day issues as diverse as waste electrical recycling, animal by-products, biocides, animal welfare, endangered species and of course non-native species cross his desk. He has watched the issue of non-natives develop in the Convention on Biological Diversity and followed the implications of discussions there as they reached the UK. He has played an active role in the non-native species policy review and many of the initiatives that developed from it.

Dr Paul Walton

paul.walton@rspb.org.uk

Paul worked in bird conservation and research in Asia, S America and the Middle East during the 1980s, followed by seven years based at Glasgow University studying the feeding ecology and diving behaviour of seabirds in Shetland and Orkney, and the ecological impacts of the Braer oil spill. He is the Species and Habitats Policy Officer for RSPB Scotland, coordinating the RSPB's work on some key species such as corncrake and corn bunting, and taking policy lead in areas such as Avian Influenza, geese and agriculture, predation and non-native species.

Dr Cathy Maguire

cmauire@envirocentre.co.uk

Cathy is the project manager for the Invasive Species in Ireland project run by EnviroCentre and Quercus and jointly funded by Environment and Heritage Service (NI) and National Parks and Wildlife Service (ROI). She joined EnviroCentre as Principal Researcher in 2005 and before that was a Research Fellow at Queens University Belfast focusing on zebra mussels and other aquatic invasive species. She has substantial experience of communications dealing with public awareness campaigns on invasive species and as a policy developer, working across Government departments successfully to frame a detailed management plan for zebra mussels.

Reports from workshops

Four workshops were organised on the following topics to provide input for the developing GB strategy. The text below outlines the main points discussed and the main conclusions drawn.

Monitoring and surveillance

Chair Deborah Long (Plantlife)
Rapporteur Ian Maclean (JNCC)

The group agreed that there were currently excellent data collection mechanisms in GB and an efficient means of displaying these data (via the NBN). There were great benefits to piggybacking on these existing recording schemes (indeed there is little option). The group recognised that there are gaps in existing schemes but that these had been largely identified. For future reference, there needs to be careful targeting of monitoring effort, including in areas where non-native species had apparently not been found. There also needs to be a measure of surveillance effort where possible.

The data collected on non-native species need to be provided free at point of delivery. Concerns were expressed over long-term funding of datasets.

The links between monitoring and public awareness were acknowledged as was the importance of feedback to recorders. Schemes also need to be user-friendly, broadening their appeal beyond existing specialists perhaps with the use of training materials or events to raise awareness (it needs to be made easy). There needs to be synchronicity between national and local schemes and perhaps a top 10 target species to focus the general public (and others) on. Getting industry to sign up and participate was also suggested as being beneficial, including potentially making it a legal requirement to report invasive non-native species.

There was agreement that taxonomy was important and the use of existing centres of excellence was encouraged. There needs to be an input from taxonomists overseas - with both national and international contact points with bilateral or multilateral arrangements perhaps necessary. The National History Museum's scheme for raising standards was also mentioned as being useful.

Education and awareness

Chair David Gilchrist (HTA)
Rapporteur Trevor Renals (EA)

This group suggested that the messages needs to be consistent and relatively simple (but not too simple). Having a simple primary message with a more in-depth secondary one (for those who want to probe deeper) was seen as a good compromise and an efficient way to deliver accurate messages.

Overall there needs to be both a general raising of awareness as well as more targeted awareness for specific issues. There needs to be a selling of the benefits to the public. However, the fundamental issue is changing behaviour, not just raising awareness. One 'hit' is okay but it needs to be maintained to have a lasting impact (cf. the Horticulture Code of Practice).

We need to engage with professionals (e.g. social scientists), not simply confine discussions to scientists and policy makers, as these are the people who know how best to get the message across.

We need to identify the most appropriate media, using the Secretariat website as a hub to direct people to the main sources of information but with better co-ordination of relevant websites. Media such as local radio should not be ignored – this medium is used with great success by Local Authorities to disseminate health messages.

There needs to be careful management of public expectations with questions raised on how do you deal with public interest/questions etc. Education of a broad spectrum of target audiences is vital, including magistrates, government officials and ministers. Piggy-backing on the interest in climate change was suggested as one way forward.

Horizon scanning and climate change

Chair Richard Baker (CSL)
Rapporteur Dick Shaw (CABI)

There was lively discussion on whether species arriving here as a result of climate change were as a result of a natural process and should or should not be included in the Framework Strategy. There was the suggestion that for most marine species there is not much that can be done about them if they are spreading north due to climatic change. In the end the general view was that one needed to be pragmatic about which species to include: the 'no hoppers' should not be tackled and there needs to be a cost/benefit analysis to inform whether action could take place or indeed the level of action that should be undertaken.

There was general agreement that invasions induced by climate change are different from repeat introductions that are due to direct human agency. In the latter case there are often things that can be done to restrict the flow but for invasions induced by climate change there is not much that can be done to prevent them from arriving. The maintenance of habitat connectivity to facilitate climate change-induced movement of native species may help invasive species spread too.

For horizon scanning the main scientific priority was risk assessment. There should, however, be a two-tier risk assessment process with rapid assessments possible to facilitate rapid reaction. There also needs to be a central contact point which can deal with queries and is properly funded.

In terms of actual issues that are likely to increase in importance the following were highlighted as examples:

- Increased trade with the Far East;
- The spread of southern European species;
- The faster (and colder) sea passage if a 'northern' passage (north of Russia) opens to shipping following ice melt in summer;
- Problems associated with a drier climate (more transfers of water leading to greater movement of species);
- Internet sales of invasive species;
- The increase in aquaculture due to warmer seas.

The list of species which pose the greatest threat to GB were considered to be: Signal Crayfish, Slimy tunicate, grey squirrel, topmouth gudgeon, Asian longhorn beetle, American mink, horse chestnut leaf miner, small hive beetle, water primrose, *Rhododendron ponticum*, Japanese knotweed, Colorado beetle and ballast water passengers.

Legislative priorities

Chair Angela Robinson (Scottish Executive)
Rapporteur Olaf Booy (RPS)

The discussion raised many interesting points and suggestions. Unfortunately there was limited opportunity to explore how they might fit in with other regulatory requirements.

The issues presented as most urgently needing to be addressed through legislation centred around gaining clarity of the impact of non-native species and assigning responsibility for tackling NNS issues. It was felt that legislation should provide the mechanism to overcome regulatory hurdles that can provide barriers to rapid response and contingency planning and that there should be a duty on Ministers to require action. It was suggested that existing legislation should be consolidated, developing specific non-native species legislation, with regard for potential disparity between the three nations. Action and change could be effected more rapidly by setting out who is responsible for particular issues, including for taking practical action, but it was recognised that this might also be achieved without legislation through establishing understanding and consensus on remits.

Legislation needs to reflect the variety of impacts of different non-native species, and that species native to GB can be invasive outside their natural range, when introduced not only to offshore islands but to new water bodies or regions of the mainland.

Current legislation is difficult to enforce because it lacks clarity and definition of key terms. There is a risk that undesirable species cause negative impact before the risk they pose is assessed and they are listed on Schedule 9 (of the Wildlife and Countryside Act). The use of a white list of allowed species was proposed as more robust than the current Schedule 9 approach, and the feasibility of a white list approach to imports was discussed with regard to WTO regulations, risk assessment, etc. Listing of higher taxonomic groups rather than individual species was suggested as a way of simplifying the approach to Schedule 9.

Specific issues mentioned included powers of access to land to take action, the polluter pays principle, and laws that accidentally protect invasive species (e.g. non-native wild birds).

The key role of raising awareness was discussed and the importance of encouraging people to interact and not fear prosecution when asking for advice on control of invasive species was stressed. PAW (Partnership for Action Against Wildlife Crime) is a useful model for raising awareness and there are other mechanisms available e.g. animal welfare legislation preventing the spread of goldfish obtained from fair grounds into river systems. There are opportunities for government bodies to raise awareness of and compliance with best practice by insisting that it is followed when contracting services.

Panel session

A panel, consisting of Hilary Thompson (PB Chair), Niall Moore (NNSS), Huw Thomas (Defra), Angela Robinson (Scottish Executive), Paul Walton (RSPB) and Keith Davenport (OATA) answered questions from the floor. The main points of the discussion are outlined below.

Sallie Bailey (Forestry Commission) asked whether the Environmental Liabilities Directive will bring in the polluter pays principle to the invasive species area, i.e. could invasive species be considered as 'pollution'.

Several members of the panel responded to this with the main problem being that in many, if not most cases, identification of exactly who is responsible for the release is not straightforward.

Deborah Long (Plantlife) made the point that grouping of species (for legislative purposes) within some taxonomic groups (e.g. plants) was not appropriate. Tony Dickerson from the RHS agreed with this point emphasising that there are several hundred hybrids of *Rhododendron ponticum* and any restrictive legislation would cover all of these by default.

Tim Barratt (Tweed Forum) mentioned that 'control' had not been brought up during the afternoon's proceedings but that there was a lot of control work on invasive non-native species being carried out. He stated that there needs to be greater support for control work.

Matt Hartley (Defra) asked if there were plans to monitor densities as well as just occurrence of non-native species.

Ian McLean (JNCC) replied that for most groups this would be too expensive to do and was not strictly necessary.

Steve Hunter (Defra) pointed out that on issues of management vs. control vs. eradication we will have to make difficult choices. How much money do you put into containment (e.g. mink control on mainland vs. eradication on individual islands)? Getting the balance right is tricky but key. Paul Walton agreed.

Trevor Renals (EA) enquired about resources, particularly in the current climate of government funding. When we decide on priorities, where do the resources come from?

Hilary Thompson (Defra) remarked that this was a difficult issue and one which needed to be addressed during the process of implementing the final strategy.

Tracy Edwards (JNCC) Asked why Codes of Practice had not been specifically mentioned in relation to the legislation workshop.

Hilary Thompson (Defra) replied that there was a new mechanism for securing ministerial endorsement of Codes of Practice and that these should then be taken into account by a court in the course of any prosecution.

Colin Hawke (Cornwall County Council) asked how we turn a national strategy into local delivery, how can we co-ordinate local action?

Huw Thomas (Defra) replied that the GB strategy provides a framework to address the issue of invasive non-native species on a GB scale and aims to fill the high level strategic gap that has been identified in previous work on this subject. The strategy is designed to promote cohesive policy approach at GB level that will give local initiatives a clearer national context.

Feedback from attendees

Feedback forms were distributed to all of the 82 attendees, of which 16 people responded. All agreed that the forum was worthwhile with several suggesting it should be held over two days and one suggesting it could be held less often than on an annual basis.

The current format was generally well received. Some people preferred the talks, others preferred the workshops. The variety and informative nature of the morning's talks was commented upon by many of the respondents.

There was general agreement that the workshops were worthwhile but that the time devoted to discussion was insufficient. Having a reporting session straight after the workshops was questioned by some, with the suggestion that this time could be better spent in the workshop discussions themselves. Several people wanted to attend more than one of the workshops.

Using Edinburgh as a venue was welcomed by many people with Wales (particularly Cardiff) suggested as a suitable venue for 2008 by seven of those who expressed a preference for a specific location.

Eleven of the 16 respondents answered the question on the Secretariat's performance and all were positive.

Suggestions for improvements included:

- Poster presenters should have A4 fliers of their presentations available so that they can be removed and examined later
- More time for workshop sessions
- More non-government involvement

Conclusions:

The Forum was well received and is perceived as being useful for informing, networking and discussion of issues. The structure seems to be working well but could be improved with perhaps more time devoted to discussions in the workshop sessions. Alternating locations around easily accessible parts of GB is also recommended.

List of Attendees

Aegerter, James
Non-native Species Secretariat
j.aegerter@csl.gov.uk

Akinyemi, Gloria
Defra
gloria.g.akinyemi@defra.gsi.gov.uk

Bailey, Sallie
Forestry Commission
sallie.bailey@forestry.gsi.gov.uk

Baker, Richard
CSL
r.baker@csl.gov.uk

Barratt, Tim
Tweed Forum
tim.barratt@tweedforum.com

Bayley, Sarah
Rivers & Fisheries Trusts of Scotland
sarah@rafts.org.uk

Bean, Colin
Scottish Natural Heritage
Colin.bean@snh.gov.uk

Beckwith, Paul
British Waterways
paul.beckwith@britishwaterways.co.uk

Birkeland, Kjersti
Tay District Salmon Fisheries Board
birkelandk@btconnect.com

Boos, Karin
Scottish Association for Marine Science
Karin.Boos@awi.de

Booy, Olaf
RPS Ecoscope Applied Ecologists
Booyo@rpsgroup.com

Brown, Peter
Centre for Ecology and Hydrology
pmb@ceh.ac.uk

Campbell, Ronald
Rivers & Fisheries Trusts of Scotland (& Tweed Foundation)
rcampbell@tweedfoundation.org.uk

Capel, John
The Institute of Ecology and Environmental Management
jc2@jc2.karoo.co.uk

Chapinal, Paul
Defra
paul.chapinal@defra.gsi.gov.uk

Cook, Elizabeth
Scottish Association for Marine Science
ejc@sams.ac.uk

Copp, Gordon
CEFAS
gordon.copp@cefass.co.uk

Cosgrove, Peter
Envirocentre
pcosgrove@envirocentre.co.uk

Davenport, Keith
Ornamental and Aquatic Trade Association
keith@ornamentalfish.org

Davis, Rob
Defra
rob.davis@defra.gsi.gov.uk

Dickerson, Tony
Royal Horticultural Society
tonydickerson@rhs.org.uk

Edwards, Colin
Forestry Commission
colin.edwards@forestry.gsi.gov.uk

Edwards, Tracy
Joint Nature Conservation Committee
tracy.edwards@jncc.gov.uk

Fellows, Kim
Scottish Executive
kim.fellows@scotland.gsi.gov.uk

Finch, Angela
Defra
angela.finch@defra.gsi.gov.uk

Fletcher, Mark
Central Science Laboratory
m.fletcher@csl.gov.uk

Flynn, Mike
SSPCA
mike.flynn@scottishspca.org

Gilchrist, David
Horticultural Trades Association
david.gilchrist@the-hta.org.uk

Gough, Bas
Scottish Executive
Thomas.Gough@scotland.gsi.gov.uk

Greatrex, Richard
IBMA & Syngenta
richardgreatrex@syngentabioline.com

Hartley, Matthew
Defra
matthew.hartley@defra.gsi.gov.uk

Hathaway, Sean
City and County of Swansea
sean.hathaway@swansea.gov.uk

Hawke, Colin
Cornwall County Council
chawke@cornwall.gov.uk

Haysom, Susan
Scottish Natural Heritage
Susan.Haysom@snh.gov.uk

Hill, Mark
Centre for Ecology and Hydrology
moh@ceh.ac.uk

Hitchinson, Fran
Woodland Trust
franhitchinson@woodland-trust.org.uk

Hughes, Jo
Countryside Council for Wales
j.hughes@ccw.gov.uk

Hughes, Jonathan
Scottish Wildlife Trust
jhughes@swt.org.uk

Hunt, James
Tweed Foundation
jhunt@tweedfoundation.org.uk

Hunter, Stephen
Plant Health Division, Defra
stephen.hunter@defra.gsi.gov.uk

Hunter, Verity
Non-native Species Secretariat
v.hunter@csl.gov.uk

Jam David
The Deer Initiative
central@thedeerinitiative.co.uk

Kirk, Peter
Deer Commission
peter.kirk@dcs.gov.uk

Lansdown, Claire
Defra
Claire.lansdown@defra.gsi.gov.uk

Livingstone, Joanne
Environment and Heritage Service
joanne.livingstone@doeni.gov.uk

Logie, Andrew
Halcrow/Scottish Water Solutions
Andrew.Logie@scottishwatersolutions.co.uk

Long, Deborah
Plantlife Scotland
deborah.long@plantlife.org.uk

Long, Helen
Defra
helen.long@defra.gsi.gov.uk

Long, Jo
Scottish Environment Protection Agency
Jo.long@sepa.org.uk

Luxmoore, Richard
National Trust for Scotland
rluxmoore@nts.org.uk

Maclennan, David
Scottish Natural Heritage
David.Maclennan@snh.gov.uk

Maguire, Cathy
Envirocentre
cmaguire@envirocentre.co.uk

Marchant, John
British Trust for Ornithology
john.marchant@bto.org

Martin, Bridget
Lancashire Law School
cmenzies@uclan.ac.uk

Mathieson, Scot
Scottish Environment Protection Agency
scot.mathieson@sepa.org.uk

McCollin, Tracy
Fisheries Research Services
t.a.mccollin@marlab.ac.uk

McEwan, Gavin
Horticultural Week Magazine
gavin.mcewan@haymarket.com

McLean, Ian
JNCC
ian.mclean@jncc.gov.uk

Moore, Niall
Non-native Species Secretariat
n.moore@csl.gov.uk

Nelson, Alisdair
Scottish Executive
alisdair.nelson@scotland.gsi.gov.uk

Newman, Jonathan
Centre for Ecology and Hydrology
jone@ceh.ac.uk

Pickup, Jon
Scottish Agricultural Science Agency
jon.pickup@sasa.gsi.gov.uk

Renals, Trevor
Environment Agency
trevor.renals@environment-agency.gov.uk

Roberts, Mike
Central Science Laboratory
m.roberts@csl.gov.uk

Robinson, Angela
Scottish Executive
angela.robinson@scotland.gsi.gov.uk

Rostron, Chris
Water for Wildlife
crostron@derbyshirewt.co.uk

Roy, David
Centre for Ecology and Hydrology
dbr@ceh.ac.uk

Saville, Bob
Lothian Wildlife Records Centre
info@lothianwildlife.co.uk

Shaw, Richard
CABI
r.shaw@cabi.org

Smith, Alison
Welsh Assembly Government
alison.smith@wales.gsi.gov.uk

Steer, Deryck
JNCC
deryck.steer@jncc.gov.uk

Strong, Neil
Network Rail
Neil.Strong@networkrail.co.uk

Sydes, Chris
Scottish Natural Heritage
chris.sydes@snh.gov.uk

Symmons, Jackie
Deer Initiative (Wales)
je.symmons@hotmail.co.uk

Thomas, Huw
Defra
huw.thomas@defra.gsi.gov.uk

Thompson, Hilary
Defra
hilary.thompson@defra.gsi.gov.uk

Wade, Max
RPS
wadem@rpsgroup.com

Walker, Phil
Biological Crop Protection
phil.walker10@btconnect.com

Walton, Paul
RSPB Scotland
paul.walton@rspb.org.uk

Wilson, Graeme
Midlothian Council
Graeme.Wilson@midlothian.gov.uk

Wong, Jenny
Wild Resources Limited
jenny.wong@wildresources.co.uk

Wright, Manson
Scottish Executive
manson.wright@scotland.gsi.gov.uk