



**Minutes of the 11<sup>th</sup> Meeting of  
The UK Biodiversity Research Advisory Group  
Thursday 5<sup>th</sup> June 2008  
Defra, Nobel House, London**

**Present:** Peter Costigan (Chair), Elizabeth Moore (UK BRAG Secretariat), Chris Baker (NERC), Andy Stott (Defra), Kevin Charman (Natural England), Mike Fay (Royal Botanic Gardens Kew), Mark Spencer (Natural History Museum), Andrew Pullin (University of Bangor, representing BES), Cerys Margerison (BES, Guest), Lloyd Peck (BAS), Paul Rose (JNCC), Davy McCracken (Scottish Agricultural College), Stuart Jenkins (University of Bangor, on behalf of Michel Kaiser), Allan Watt (CEH), Estelle Balian (BiodivERsA, guest), Mel Austin (Plymouth Marine Laboratory, guest), Sallie Bailey (Forestry Commission, via telephone conference)

**Apologies:** Greg Mudge (SNH), Michel Kaiser (University of Bangor), Ian Bainbridge (Scottish Executive), Mary Gibby (Royal Botanic Garden Edinburgh), Sarah Webster (Defra), David MacDonald (WildCRU, University of Oxford), Scot Mathieson (SEPA), Tim Blackstock (Countryside Council for Wales), Richard Brand-Hardy (Defra), Havard Prosser (National Assembly for Wales), Kevin Watts (Forest Research), Mark Bailey (CEH), Tina Yates (JNCC)

### **1. Welcome**

Peter Costigan welcomed members to Nobel House, for the 11<sup>th</sup> Meeting of UK BRAG, and welcomed three guests – Lloyd Peck (NERC), Ceri Margerison (BES), and Estelle Balian (BiodivERsA). Peter noted that Richard Ferris has moved on to a new role within the JNCC and wanted to record gratitude for the fantastic job he had done heading the Secretariat over the last 5 years, and to wish Richard all the best for the future.

### **2. Minutes of the last meeting and matters arising**

With a few minor amendments, these were approved as a true record of the 10<sup>th</sup> UK BRAG meeting, 4th December 2007.

#### **Matters arising**

The majority of matters arising had been dealt with, with the following still to be addressed in full:

**ACTION 2.1** (previous ACTION 3.2, carried forward): UK BRAG members to provide the Secretariat with a list of key contacts within their organisations, to form the basis of a circulation list. It was noted that not all members had responded and the secretariat will chase non-responses and report back to the next UK BRAG meeting. Deadline: 19 September 2008

Peter reported on previous Action 3.3. Following written contact with Wildlife and Countryside Link and they had responded to say they will consider re-joining UK BRAG.

**ACTION 2.2** (previous ACTION 3.4): UK BRAG members to provide the secretariat with a list of key contacts within their communities, to form the basis of a circulation list. It was noted that not all members had responded and the Secretariat will chase non-responses and report back to the next UK BRAG meeting. Deadline: 19 September 2008

**ACTION 2.3** (previous ACTION 3.7): Members are requested to notify the Secretariat of times/dates for key decisions in developing strategies of their organisations and, where possible, big, cross-organisational initiatives (i.e. thinking beyond their own organisations). Recognising that “moving targets” (i.e. rolling programmes, without fixed dates) make this a difficult action, the focus will be for major initiatives, only. It was noted that not all members had responded and the secretariat will chase non-responses and summarise how far we’ve got at the next UK BRAG meeting. Deadline: 19 September 2008

**ACTION 2.4** (previous ACTION 3.8): Secretariat is asked to produce a paper outlining the opportunities (timelines with key decision points) to inform and influence funders. This action depends on the actions above being complete. Secretariat will chase non-responses and summary how far we’ve got at the next UK BRAG meeting. Deadline: 16 October 2008

**ACTION 2.5** (previous ACTION 3.9): Secretariat to access both the NERC and BBSRC peer-review college members’ database, and contact those with biodiversity interest. Deadline: 19 September 2008

Peter Costigan reported on previous action 4.1 which was for all members to consider whether in principle they would be prepared to contribute money in support of commissioned reviews. It was agreed that this action should be dropped since the established process is for specific needs to be identified and sponsors to be approached and asked for contributions.

**ACTION 2.6** (previous action 10.2): The Secretariat to identify the key individuals with responsibility for biodiversity conservation in the Crown Dependencies and then draft a letter asking for research needs. It was noted that the JNCC organised a workshop for the Crown Dependencies in March 2008 and Richard Ferris ran a session on research needs. Secretariat is asked to prepare an update paper on outcomes of the Crown Dependencies workshop. Deadline: 7 November 2008

### **3. Knowledge Transfer / Influencing Strategy**

Paul Rose introduced a paper (BRAG 11/2) which was written by Richard Ferris and Andrew Pullin. This provided suggestions for taking forward action to develop a forward plan for UK BRAG to undertake knowledge exchange and influencing. This is an important aspect of the future of the group since it offers a plan to take a substantial amount of the BRAG Review forward. Paul asked for comments on the paper and the suggested approach. He also invited volunteers to help develop the paper and champion the ideas within it.

Alan Watt strongly supported the specific actions, and suggested there was also a place for less rigorous approaches, for example influencing the science to policy interface. Stuart Jenkins and Mel Austin supported point 2 on the list of actions, which was the formation of Review Teams. They noted the relevance of this rigorous approach.

Chris Baker asked whether the Environmental Research Funders Forum (ERFF) could help with achieving some of the actions. Peter Costigan noted that a lot of what UK BRAG does is quicker but possibly lacks some of the rigor, for example the sub-group reports. However, the question of rigor is quite hard to define in some of the issues and the BRAG reports are useful since they come out of productive open discussion amongst people who know the issues. Historically, UK BRAG has not put its conclusions into peer reviewed publications,

however Davy McCracken is seeking to address that by publishing a paper on the overview of the findings of the seven working groups in the Journal of Applied Ecology.

It was noted that UK BRAG does not have a budget for funding ad-hoc reviews and it is more likely to obtain funding for specific targeted reviews. Andy Stott noted that there are other mechanisms which UK BRAG needs a greater awareness of and engagement with such as the work of Bill Sutherland, UK Popnet, NERC funded reviews both independently and jointly with Defra.

Andrew Pullin noted that the idea of Bill Sutherland's exercise was to engage discussion and generate questions. Nothing was said about what already exists and the process is not free of bias or error. The idea proposed in paper 11/2 is to minimise bias and error by reviewing and synthesising existing data to establish what is known and unknown. Alan Watt agreed and noted the incentivisation problem to reviewing chunks of the science.

Kevin Charman asked who we want to influence, whether its people undertaking research or funders, and noted that the paper need for be aimed at these groups. Peter Costigan suggested the need to increase our effectiveness at targeting research practitioners. It would be useful to access toolkits for guidance on information sources to increase the rigor of reviews.

**ACTION 3.1: Andrew Pullin to circulate information on web-based toolkits for guidance on information sources to increase the rigor of review. Deadline: 11 July 2008**

Paul Rose noted that there were a number of ideas which could be used to improve the paper which is effectively a work programme which needs to be tailored to the scale of work UK BRAG wants to do. Peter Costigan noted the links between this paper and the report from the UK BRAG sub-group on policy benefits from research (BRAG 11/10).

**ACTION 3.2: Paul Rose to improve the paper (BRAG 11/2) along the suggestions in the discussion and build in a number of options about what the group can do as part of a work programme which will be discussed at the next meeting. Deadline for paper to be circulated: 30 September 2008**

#### **4. BiodivERsA project update**

Andy Stott provided an update on the response to the first call for proposals. The UK contribution to the project is 4m Euro, of which NERC provided 3m Euro and Defra provided 1m Euro. A total of 47 projects were invited to submit full proposals and the UK was well represented within this. UK research teams were involved in 40 projects at a total of 16m Euro. Projects will be assessed on 2 criteria: scientific excellence and high policy relevance. Projects need to have teams from at least 3 countries and address issues relevant to European countries.

Estelle Balian, Data Acquisition Manager for BiodivERsA, gave a presentation on the BiodivERsA database. A copy of the presentation will be circulated. The objectives of the database are to give web-based access to funding opportunities for biodiversity research across Europe. This includes thematic and blue skies programmes, calls or programmes for stand alone projects, and studentships and fellowships. The database is relational and the Common European Research Information Format (CERIF) standard has been used.

The database was launched at the EPBRS meeting in Leipzig, May 2007 and can be viewed at: <http://rivendell.vub.ac.be/biodiversa/>. The plan is to finish importing research project information and finish classification by June/July 2008. The next step is a big phase of

visibility and marketing which will include emailing funding managers and researchers to promote the database, attending conferences and events and improving participation of non-BiodivERsA partners in the database.

During the discussion Estelle confirmed that currently the database contains information on non-BiodivERsA partner funders such as BBSRC, at the funding programme level. The next phase will be to include information at the project level, although this will be just for BiodivERsA partners. In terms of updating the information from partners, once the initial data has been provided and entered it is anticipated that there will be an annual update which should be quite simple to provide. Peter Costigan noted that the UK ought to be aiming for a fairly automatic update of the database and made the link to the ERFF database on environmental research which currently only has historic information but is intended to have updated records.

Paul Rose questioned where responsibility lies for collating the information. UK BRAG could take responsibility for ensuring that the list within the BiodivERsA database is comprehensive at the biodiversity research programme level.

**ACTION 4.1 Secretariat to look at BiodivERsA database at programme level and ensure it includes comprehensive information on biodiversity research programmes including logistical contact details. Deadline: 31 July 2008**

Peter Costigan noted that the BiodivERsA database is a useful resource, UK BRAG should provide co-ordinated support since it will benefit the group. Estelle Balian noted that the funding for the BiodivERsA project stops in April 2009 and confirmed that there is an option to seek an extension of the ERA-Net.

## **5. UK BRAG collaboration with the British Ecological Society (BES)**

### **Special Session on Ecosystem Services, BES Annual Meeting 4<sup>th</sup> September 2008, London**

Cerys Margerison BES, provided an update on progress with arrangements for the Special Session on *Ecosystem Services* at the 2008 BES Annual Meeting (BRAG 11/3). See <http://www.britishecologicalsociety.org/articles/publicaffairs/meetings/> Georgina Mace has confirmed that she will provide an introduction, Bob Watson is being chased and responses are due from Andy Balmford and Andrew Watkinson. UK BRAG members were urged to register as soon as possible to avoid disappointment, and were asked to consider whether to take advantage of other promotional opportunities at the conference.

Peter Costigan reminded members of the very successful session at the BES conference in Glasgow in 2007. This opportunity would provide another chance to engage with the research community and take forward useful and influential thinking. Andrew Pullin reinforced the importance of the opportunity to promote what UK BRAG does, especially the papers which have been produced since the BRAG report which was issued at the 2007 conference. Davy McCracken noted that it would be useful to capture who attends the Special Session and what they know about UK BRAG.

**ACTION 5.1: Secretariat to add information about the BES Special Session to the UK BRAG website and all members to add information on this to their websites as appropriate. Links can be found at:**

[http://www.britishecologicalsociety.org/articles/meetings/current/2008\\_annualmeeting/](http://www.britishecologicalsociety.org/articles/meetings/current/2008_annualmeeting/) and <http://www.britishecologicalsociety.org/articles/publicaffairs/meetings/>

Deadline: 27 June 2007

### **BRAG paper for Journal of Applied Ecology**

Davy McCracken reported on progress with submission to the Editors of the Journal of Applied Ecology (BRAG 11/3). He is still waiting for feedback and has had no response to date. The manuscript was originally written with Richard Ferris and it would be good to get some engagement from other UK BRAG members. It was agreed that initially Davy should liaise with Peter Costigan, Paul Rose and the secretariat.

## **6. Update on joint UK BRAG and BRIG activities in relation to UK BAP Research**

Paul Rose provided an update on the paper (BRAG 11/4) written by Richard Ferris and Ant Maddock, Secretariat for the Biodiversity Research Information Group (BRIG). The results from a recent exercise of the BAP review identified 2043 actions related to research and/or survey and monitoring. Paul noted Wildlife and Countryside Links' interest in this area and the need for their engagement in the process. Paul identified an additional option to progressing the work which is a hybrid, combining actions from some of the other options outlined in the paper. Essentially this fourth option would be to get some facilitatory work done rapidly to inform UK BRAG's original idea of a workshop. This could go out to wider consultation for comment on the work UK BRAG has done.

Peter Costigan noted that UK BRAG's role must be made clear from the outset, since it is unrealistic to expect this group to prepare research proposals for all the habitat and species plans. UK BRAG should search out generic issues and answers to help the individual HAPs and SAPs. BRIG needs to look at individual aspects of HAPs and SAPs.

Paul Rose suggested that by combining UK BRAG and BRIG you cover the issue fully. The two groups have got to work together to cover the full scope of research actions identified.

Sallie Bailey noted that the lists are still very much draft and there is a long way to go before the country groups and HAP groups finalise them. There is some reluctance to assign SAPs to HAPs due to concerns that research at the specific level may be lost. Peter Costigan noted that since the review of priority species which effectively increased the number of priority species significantly, it is now impossible to deal with the actions on a species by species basis. Therefore there is an effort to integrate individual species actions into HAPs. Clearly there is a need to improve understanding of species and habitat relationships and to refine the information we have to make it more manageable by a small number of groups.

Andy Stott suggested it would be useful to expand Annex 1 of paper 11/4, to include a list of species within each of the themes of particular relevance. He confirmed that Defra intend to provide funding for research into species specific issues in line with Natural England's Species Recovery Programme.

Peter Costigan thanked Paul Rose for his suggestion and noted to need to identify a way forward to keep up momentum. Paul Rose noted the possibility of some capacity within the JNCC BRIG and UK BRAG Secretariat budgets to progress this. He suggested drawing up a contract with Wildlife and Countryside Link, appointing a facilitator to take this forward and run a workshop with 20-30 key people in the autumn. This would be the first analysis which could go out to subsequent consultation. Sallie Bailey offered additional support for this proposal.

**For noting: an expanded outline of Paul Rose's suggestion is appended as Annex I to these minutes.**

**ACTION 6.1: Paul Rose to add paragraph at front of paper (BRAG 11/4) to clarify situation regarding role of UK BRAG in process of UK BAP habitats and species review. This to be done in conjunction with Wildlife and Countryside Link. Deadline: 31 July 2008**

**ACTION 6.2: Paul Rose to discuss mechanism for progressing this work with Sallie Bailey and Peter Costigan. Deadline: 31 July 2008**

## **7. Update on NERC's Biodiversity Theme Action Plan**

Lloyd Peck, NERC's Biodiversity Theme Leader, gave a presentation to update members on NERC's Biodiversity Theme Action Plan (TAP). Each of the seven theme reports are available for download at: <http://www.nerc.ac.uk/research/themes/> and the presentation will be circulated.

The biodiversity TAP was submitted to NERC's Science and Innovation Strategy Board (SISB) in January 2008. SISB are in the process of making recommendations to NERC Council, who will shortly convene to decide what to do with each of the actions. The first spend on the TAPs will be 2009-2010.

The primary challenge identified in the biodiversity TAP is to "improve understanding of biodiversity's role in ecosystems". This is the overarching aim and sets the underlying context for the whole theme, taking a whole ecosystem approach. The major research aims recommended in the TAP were:

- Environmental gradients and ecosystem sustainability
- Ocean acidification
- Biodiversity in poorly described areas
- Integrated tools for assessing value

There were three areas identified for future work priorities, since they were considered to be limiting factors which need to be addressed:

1. New tools for rapid taxonomic evaluation
2. Monitoring
3. Mathematical and computational tools

The issues for development of future TAPs were identified as follows:

- Agriculture and biodiversity
- Marine bioresources
- Environmental heterogeneity and biodiversity patchiness
- Long-term trends in biodiversity
- Placticity, evolution and resilience
- Invasive alien species
- Health of the environment

The likely outcomes for the biodiversity TAP this year following council decisions on the TAPs are as follows:

- Ecosystem sustainability: likely to be large scale experiment, informed by a series of scoping studies to predicate what happens in next year's SISB decisions. There is considerable support for something large scale looking at ecosystem sustainability.
- Ocean acidification: likely to proceed to commissioning phase this year
- Monitoring: likely to go through a review of monitoring activities
- Mathematical tools: there is support for this, but there needs to be a level of prioritisation
- Novel biodiversity: needs scoping activities

- Valuation: Needs scoping activities, joint with Sustainable Use of Natural Resources theme.
- Taxonomy: there is support for a review
- ESPA: existing commitment and support in the region of £2.5m
- BiodivERsA: existing commitment and support agreed of £2.1m

The next steps are to continue dialogue with stakeholders and the science community and to develop partnerships including the relationship with programmes such as LWEC.

Kevin Charman asked if the large scale experiment was likely to be UK-based. Lloyd Peck confirmed that it would be since a lot is already known about the role of biodiversity in ecosystems within the UK and that experience and science can be built upon. Also, the UK has the capacity to do this.

Alan Watts asked about gradient experiments. Lloyd Peck noted that the choice has to be made between natural and man-made effects and gradients within the resources available. Then partnerships need to be built to enable further research. The idea is to provide enough to set the process up and then the consortium can take it further and progress it.

Peter Costigan noted that the ERFF are moving forward on the issue of environmental monitoring, and there jointly funded programme of £0.5m p.a. which Defra, NERC and others contribute to. Lloyd Peck clarified that among the sub-actions of the monitoring headline was the need to engage with ERFF and ensure they are aware of the biodiversity challenges and headlines identified in the TAP and use that process as far as possible.

Peter Costigan also noted his involvement with NERC's National Capability Advisory Group which looks at NERC's capability for funding. Lloyd Peck explained that this group will meet for the first time next week, chaired by Tony Rashwell, with directors from 6 NERC institutes and 6 other members. Over a period of time, the resources to the NERC institutes will decline. It is anticipated that in the future these centres will be able to bid into this group.

## **8. Evidence to House of Lords Systematics inquiry**

Peter Costigan expressed thanks to Richard Ferris and others involved in producing 2 papers (BRAG 11/5 and BRAG 11/6) in response to the House of Lords Systematics inquiry. He noted that UK BRAG was consequently able to provide quite an effective input to the inquiry since the lines of questions that came to the Defra Minister were informed by points raised in the papers. It is anticipated that the House of Lords recommendations will be issued before the summer recess.

Ceri Margerison asked whether UK BRAG had prepared a response to the House of Lords inquiry to halting biodiversity loss. Peter Costigan noted that this had not happened and explained that the UK BRAG doesn't have a mechanism for responding to inquiries, partly due to the fact that the group only meets bi-annually and the timescale for responses is often very brief, making it hard to get a coherent response.

Alan Watt noted that Richard Ferris has prepared responses to inquiries in the past. Paul Rose suggested that members inform the secretariat if they are aware of an inquiry and the secretariat could co-ordinate the sharing of views across common lines and pull together the common themes to reinforce UK BRAG's ethos. Peter Costigan noted that it would be hard to get agreement on policy-focused issues and Andy Stott agreed that the response has to be focused on the remit of UK BRAG. Mike Fay noted that Kew was able to flag up whole areas of research however the timescale was very tight to get consensus on the issues. Ceri

Margerison offered to add members' comments to future BES responses and encouraged members to get in touch with the BES and send comments at the earliest opportunity.

## **9. EPBRS update**

Andy Stott referred to the paper on the summary recommendations from the Slovenian meeting which was re-circulated prior to the meeting. This included the key recommendations and policy need for freshwater biodiversity. Paul Rose noted that the word "freshwater" could be removed, or substituted with another habitat type and not change the emphasis of the paper, however Andy Stott noted the paper was considered in relation to requirements of the Habitats Directive, the Water Framework Directive and the Groundwater Directive and was intended to raise awareness on the issues of freshwater.

The next theme to be considered at EPBRS is biodiversity and business and this will be discussed at the Paris meeting 17-21 November. Issues will include impact evaluation, indications, mitigation, ecological engineering, integrating biodiversity in company strategies and experience from industry. This is a different area for EPBRS and they will need to consider tools of evaluation, economics and behaviour.

Alan Watt noted that the usual preparatory process for the EPBRS would involve an electronic conference followed by a national review. UK BRAG has previously helped out with the national review. Mel Austin offered support from Plymouth Marine Laboratories. Peter Costigan suggested contacting environmental certification organisations. Lloyd Peck noted that the social elements were likely to be of interest to other research councils including ESRC and some of the LWEC committees.

Andy Stott noted that there is an opportunity for UK to host a meeting of the EPBRS subgroup which will reflect on the strategic direction of the EPBRS. This will be a one-day workshop and UK BRAG could help to shape it by considering what the objectives are, who it should be for, the timescale and what to include, for example the role of EPBRS in developing the science to policy interface in Europe, defining its niche and role in relation to other initiatives. This could be developed over the next two UK BRAG meetings.

## **10. Reports from UK BRAG sub-groups**

### **Marine biodiversity goods and services**

Mel Austin, Head of Science, Biodiversity and Ecosystem Function, Plymouth Marine Laboratory provided a presentation in support of the sub-group (BRAG 11/9). The group met for an initial brainstorming session, individually prepared different sections and these were collated by Jo Myers (Defra). Whilst the focus is on marine issues there is a lot of overlap with terrestrial goods and services issues. Some parts of the direct marine goods and services are well known and quantified, however this is not a complete picture and much less is known about the indirect goods and services, for example gas and climate regulation.

The sub-group narrowed down the issue to 2 overarching strands: natural science and social science. They identified 10 gaps in understanding which could be broadly grouped into 4 themes. 9 of these gaps were in natural science and ecology and only 1 was in evaluation.

The 4 foci for priority research are as follows:

1. Biodiversity ecosystem function
2. Critical properties
3. Quantification of the goods and services
4. Importance of marine biodiversity change to the delivery of goods and services

The underlying key to all this is the issue of knowledge transfer.

The sub-group found it was useful to go through the process and identify the key issues and the results should have a wide range of uses including influencing policy, advising decision makers and assisting researchers. The sub-group were keen to publish the results of the paper and were considering which would be the most appropriate publications.

Stuart Jenkins agreed that the sub-group should aim to publish the paper since it would be very useful to have it more widely available and publicised. Chris Baker suggested approaching Andrew Watkinson for advice on where to publish. Davy McCracken asked what state the paper is in and Mel Austin clarified that it has been finalised and can be passed on to colleagues, however it should not be posted onto websites in case there is the possibility of publication.

Peter Costigan noted that there was no information about estimating goods and services for example how much carbon gets sequestered by the atmosphere. Mel Austin noted that it is probably not possible to quantify many of the goods and services but one approach would be to find indicators. Sometimes it is simpler to estimate at global scales, for example how much carbon is sequestered. At the UK scale it may be possible to use indicators and attempt to measure this. For issues such as bio regulation of waste it is relatively easy to quantify this at the local level.

Peter Costigan thanked Mel Austin and the sub-group for all the hard work they had put into the paper. He noted that it would be sensible to seek a way of getting the paper published and also putting it on the website and promoting it through the BES Special Session.

### **Policy benefit from research**

Paul Rose introduced the report from the sub-group on policy relevant use of research (BRAG 11/10). At the last UK BRAG meeting the first set of results were published. Since then, the sub-group met to clarify the scope of work, which they agreed would stop at the stage where research feeds into policy. The intention is to take full use of existing data, to use case studies (as suggested in point 5) and to define the audience.

One major conclusion is that there are a vast number of recommendations from ERFF and Science Meets Policy 2005 but very little action. Some of the recommendations could be advised by existing work. Annex 3 suggests questions that could be posed to investigate barriers to action for progressing the recommendations.

The sub-group requested more UK BRAG support since it is a small group of 5 and needs more expertise. Links were made with this report and the paper on knowledge exchange (BRAG 11/2).

Peter Costigan noted that this was a useful paper in terms of bringing together recommendations, however it hasn't put the recommendations in the context of biodiversity research. To make it more effective it should consider what can be done from the biodiversity side in getting policy relevant use of research. Furthermore, many recommendations do get implemented as approaches and barriers can be overcome in certain circumstances but it's hard to pinpoint a specific strategy. The issue is more about raising awareness.

Paul Rose noted that Annex 1 of paper 11/2 attempts to put the recommendations and barriers into the biodiversity context, however to do this task fully would require a broader audience. Initially the whole of UK BRAG would need to be consulted followed by a wider audience.

Alan Watt suggested the value in using case studies where larger groups including experts could be involved. Peter Costigan noted the need to clearly define the scope of the case

study, adding that this approach could draw generic lessons but would not make recommendations on how the issue could be done better. Andy Stott suggested greater refinement of the policy area case study would make it more likely to make progress, for example one aspect of agri-environment schemes.

Andrew Pullin clarified the difference between the knowledge exchange paper and this paper. The knowledge exchange paper is trying to get the biodiversity research message out to the research and funding communities. The policy benefit paper considers the balance between getting knowledge into the policy area. Paul Rose agreed that these links are not fully understood and suggested further discussion with Andrew Pullin.

**ACTION 10.1: Paul Rose and Andrew Pullin to discuss and clarify the links between the knowledge exchange paper (BRAG 11/2) and the policy relevant use of research paper (BRAG 11/10). Deadline: 31 July 2008**

Peter Costigan thanked Paul Rose and the sub-group for the report and encouraged other UK BRAG members to join the sub-group, to build on the ERFF work and to make it specific to biodiversity research.

**UK BRAG contract: what characterises research that has moved biodiversity conservation forward**

Paul Rose introduced the suggestion from Richard Ferris and Tim Blackstock to identify examples of best practice of research which has moved biodiversity conservation forward. UK BRAG could commission studies of those pieces of research.

Andrew Pullin noted that measuring impact in a quantitative way is very difficult but it could be done in a qualitative way by identifying what has happened and the evidence used to inform that, tracking back to look at the impacts. The methodology exists in the DfID RAPID approach.

Peter Costigan noted the likelihood that specific pieces of underlying research would be investigated which would feed into the bigger picture. Paul Rose noted the interest from the group and suggested Tim Blackstock work with the secretariat to bring a paper to the next UK BRAG meeting.

**ACTION 10.2: Secretariat and Tim Blackstock prepare a paper outlining the proposal for a UK BRAG contract on what characterises research that has moved biodiversity conservation forward for discussion at December UK BRAG meeting. Deadline: 30 September 2008**

## **11. GBSC Report**

The secretariat gave a short update (BRAG 11/7) on the current activities of the Global Biodiversity Sub-Committee (GBSC):

- Global Biodiversity Information Forum
- Earth Observations
- Ecosystem Services and poverty alleviation
- Feedback from the House of Lords Systematics and Taxonomy Inquiry

Peter Costigan suggested the possibility to link UK BRAG with GBSC on the issue of Earth Observations (EO). Andy Stott noted GBSC's discussion on where to exert influence over the number of international initiatives on EO. The UK is coordinating activity within the land working group of the Global Monitoring for Environment and Security (GMES) initiative. This

has a UK focus and is co-chaired by Andy Stott and Lawrence Way (JNCC). It was agreed that Andy Stott would act as the UK BRAG link to EO.

## **12. Report on the JNCC Research Needs project**

The secretariat provided an introduction to the JNCC research needs project (BRAG 11/8). The objective is to produce a Research Agenda for the UK Statutory Conservation Agencies that can be promoted to the science delivery and funding communities. The JNCC has undertaken a series of brainstorming sessions, gathering information on research needs from the JNCC programme teams and the country agencies. This long list of research needs is being refined and developed into a series of research proposals. The intention is for the first draft of the Research Agenda to go out to peer review during summer 2008 and the final report to be published and launched spring 2009.

Davy McCracken asked how far the results match the work of UK BRAG. Paul Rose noted there was quite a close match since many of the UK BRAG research needs reflect the Conservation Agencies needs. The idea is to strengthen confidence in both groups. Andy Stott raised a concern about the potential for competition between the UK BRAG report and the launch of the Research Agenda. Paul Rose suggested the need to make explicit references to the work of the UK BRAG within the Research Agenda and to set the work clearly in the context of UK BRAG. The first draft would be circulated to UK BRAG when available.

Andrew Pullin queried the extent to valid the research needs. Paul Rose noted that the focus was on new research, but the process was not an exact science. Kevin Charman suggested the likelihood that the agencies will have underestimated the amount of information that already exists but the higher level agenda needs to map onto the UK BRAG research needs.

Peter Costigan suggested the use of “information needs” or “evidence needs” rather than “research needs” which would help make the Research Agenda distinct from the UK BRAG report and would be complementary to the paper on policy relevant use of research (BRAG 11/10). Lloyd Peck suggested looking at the tractability of the questions to see how they have been approached in the past. Kevin Charman noted the flipside to this in terms of policy since some bits would be more powerful in terms of influencing policy than others. Lloyd Peck observed that this would not be as efficient in terms of assessing what is a tractable piece of research.

Paul Rose noted the need for the country agencies to identify which bits of work they should fund and to communicate their research needs as a group. The document clearly required clarity on the role of the agencies in biodiversity research and the links to the UK BRAG report. This should enable the JNCC and the country agencies to become more proactive as a BRAG partner.

**ACTION 12.1:** Secretariat to circulate first draft of JNCC research agenda to UK BRAG when available.

## **13. Current issues/research needs of Country Biodiversity Groups**

Peter Costigan noted this opportunity for the Country Biodiversity Groups to raise issues for the Country Liaison Group to take forward. No issues were raised, however Paul Rose noted the need for the Country Biodiversity Groups to be made aware that this opportunity exists.

## **14. AOB**

Andy Stott noted Bill Sutherland's horizon scanning paper<sup>1</sup> which identified 25 issues which could impact on biodiversity and the research needed to address the issues. Andy Stott will circulate a paper for discussion in advance of the next UK BRAG meeting.

**ACTION 14.1:** Andy Stott to prepare a brief paper identifying the issues for UK BRAG to discuss following Bill Sutherland's horizon scanning paper. Deadline: 10 October 2008

Alan Watt noted an interim report of the Stern-style review on The Economics of Ecosystems and Biodiversity has recently been published<sup>2</sup>.

The secretariat noted the Biotechnology and Biological Sciences Research Council (BBSRC) consultation to inform future directions in research in relation to environmental change (including climate change). This has been launched as part of a review for the BBSRC. A panel of independent experts, chaired by Professor Alistair Hetherington (University of Bristol) is conducting the review for BBSRC and would welcome comments on potential research priorities. The consultation is open until 25 July 2008 and is available at: [http://www.bbsrc.ac.uk/organisation/policies/reviews/consultations/0805\\_environmental\\_change.html](http://www.bbsrc.ac.uk/organisation/policies/reviews/consultations/0805_environmental_change.html)

**ACTION 14.2:** Paul Rose and secretariat to prepare a draft response to the BBSRC consultation and circulate to UK BRAG for comments. Deadline: Draft to be circulated by 30 June 2008, responses to be sent to secretariat by 9 July 2008

## 15. Date of next meeting

The 12<sup>th</sup> Meeting of UK BRAG will take place on either 8, 9 or 10 December 2008. The location is likely to be the new environment centre in Bangor (to be confirmed), and members will be notified in due course.

**ACTION 15.1:** All UK BRAG members to notify the Secretariat of their preferred date for the meeting. Deadline: 11 July 2008.

**NOTE:** The meeting was not followed by a meeting of the UK BRAG Country Liaison Group due to there being insufficient members present.

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<sup>1</sup> Future novel threats and opportunities facing UK biodiversity identified by horizon scanning. *Journal of Applied Ecology* 2008, 45, 821–833 <http://www.blackwell-synergy.com/doi/pdf/10.1111/j.1365-2664.2008.01474.x>

<sup>2</sup> [http://ec.europa.eu/environment/nature/biodiversity/economics/pdf/teeb\\_report.pdf](http://ec.europa.eu/environment/nature/biodiversity/economics/pdf/teeb_report.pdf)

## **Annex I – Further information to agenda item 6.**

There is a need to make urgent progress in implementing some of the more obvious and easy requirements for research survey and monitoring arising out of the actions proposed for the new list of BAP priority species and to start the process necessary to further elaborate some of the less obvious requirements. The UKSC asked the two groups, BRIG and BRAG, to take collective responsibility for the work and both groups have agreed the following process after their last meetings.

In summary, a workshop of circa 30 carefully selected individuals will be organised in the autumn to:

- Identify single species research survey or monitoring requirements that could be taken forward immediately.
- Identify obvious groupings of research survey and monitoring requirements that could be taken forward collectively, now.
- Recommend a process to BRIG/BRAG for further developing remaining research survey and monitoring requirements.

The workshop will be organised by a facilitator who will also make currently available information available to the workshop in an easily digestible form and structure the workshop in a manner most likely to make good progress. The facilitator will be provided with all research, survey and monitoring actions proposed for the new BAP priority list of species, the initial considerations of the research survey and monitoring actions undertaken by JNCC and the BRIG/BRAG sub-group and relevant information from all other stages of the BAP species list review.

The specification for work will be drawn up, and the facilitator managed, by a project group made up of JNCC and Wildlife and Countryside Links. The already established BRIG/BRAG sub-group will be consulted/informed at obvious milestones in the process e.g. on completion of the specification of work, on the invitation list for the workshop and on the presentation of actions and information for the workshop. The sub/group might also usefully meet after the workshop to consider the recommendations and results from the workshop. This sub-group meeting could:

- Transmit research, survey and monitoring action identified as ready for implementation, to country biodiversity groups, the Defra information gap project to be administered by Natural England and other relevant sources as appropriate.
- Consider generic and grouped research survey and monitoring actions identified by the workshop, in relation to BRAG's work to date and recommend how BRAG can best promote these actions.
- Consider recommendations from the workshop on how to deal with research survey and monitoring actions that require further elaboration, and propose to BRIG and BRAG how to act on these recommendations.

Resources for this initial work to organise, run and prepare for the workshop are being considered by BRIG and BRAG secretariats, Defra and Forestry Commission.

**ACTION AI - 1: JNCC secretariats for BRIG and BRAG to initiate and run the process outlined above for consideration and implementation of research, survey and monitoring actions proposed for the new list of BAP priority species and habitats.**

## Summary of Action Points – 11<sup>th</sup> UK BRAG Meeting, 5 June 2008

Action Point No.	Description	Action For	Deadline	Progress
2.1	Secretariat to follow up non-responses from UK BRAG members for details of key contacts within their organisations, and report back to the next UK BRAG meeting.	Secretariat plus all UK BRAG members	19/09/08	
2.2	Secretariat to follow up non-responses from UK BRAG members for a list of key contacts within their communities, and report back to the next UK BRAG meeting.	Secretariat plus all UK BRAG members	19/09/08	
2.3	Secretariat to follow up non-responses from UK BRAG members for key decisions in developing strategies of their organisations and, where possible, big, cross-organisational initiatives (i.e. thinking beyond their own organisations). Secretariat will summarise how far we've got at the next UK BRAG meeting.	Secretariat plus all UK BRAG members	19/09/08	
2.4	Secretariat is asked to produce a paper outlining the opportunities (timelines with key decision points) to inform and influence funders. This action depends on the actions above being complete. Secretariat will chase non-responses and summary how far we've got at the next UK BRAG meeting.	Secretariat	16/10/08	
2.5	Secretariat to access both the NERC and BBSRC peer-review college members' database, and contact those with biodiversity interest.	Secretariat	19/09/08	
2.6	Secretariat is asked to prepare an update paper on outcomes of the Crown Dependencies workshop.	Secretariat	7/11/08	
3.1	Andrew Pullin to circulate information on web-based toolkits for guidance on information sources to increase the rigor of review.	Andrew Pullin	11/07/08	
3.2	Paul Rose to improve the paper (BRAG 11/2) along the suggestions in the discussion and build in a number of options about what the group can do as part of a work programme which will be discussed at the next meeting.	Paul Rose	30/09/08	
4.1	Secretariat to look at BiodivERsA database at programme level and	Secretariat	31/07/08	

	ensure it includes comprehensive information on biodiversity research programmes including logistical contact details.			
5.1	Secretariat to add information about the BES Special Session to the UK BRAG website and all members to add information on this to their websites as appropriate.	Secretariat and UK BRAG members	27/06/08	
6.1	Paul Rose to add paragraph at front of paper (BRAG 11/4) to clarify situation regarding role of UK BRAG in process of UK BAP habitats and species review. This to be done in conjunction with Wildlife and Countryside Link.	Paul Rose	31/07/08	
6.2	Paul Rose to discuss mechanism for progressing this work with Sallie Bailey and Peter Costigan.	Paul Rose, Peter Costigan and Sallie Bailey	31/07/08	
10.1	Paul Rose and Andrew Pullin to discuss and clarify the links between the knowledge exchange paper (BRAG 11/2) and the policy relevant use of research paper (BRAG 11/10).	Paul Rose and Andrew Pullin	31/07/08	
10.2	Secretariat and Tim Blackstock prepare a paper outlining the proposal for a UK BRAG contract on what characterises research that has moved biodiversity conservation forward for discussion at December UK BRAG meeting.	Secretariat and Tim Blackstock	30/09/08	
12.1	Secretariat to circulate first draft of JNCC research agenda to UK BRAG when available.	Secretariat	When available	
14.1	Andy Stott to prepare a brief paper identifying the issues for UK BRAG to discuss following Bill Sutherland's horizon scanning paper.	Andy Stott	10/10/08	
14.2	Paul Rose and secretariat to prepare a draft response to the BBSRC consultation and circulate to UK BRAG for comments. Deadline: Draft to be circulated by 30 June 2008, responses to be sent to secretariat by 9 July 2008	Paul Rose and Secretariat	9/07/08	
15.1	All UK BRAG members to notify the Secretariat of their preferred date for the meeting. Deadline: 11 July 2008.	UK BRAG members	11/07/08	

AI - 1	JNCC secretariats for BRIG and BRAG to initiate and run the process outlined in Annex 1, for consideration and implementation of research, survey and monitoring actions proposed for the new list of BAP priority species and habitats.	BRIG and BRAG secretariats	16/10/08	
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