

# UK SPA SCIENTIFIC WORKING GROUP

## MEETING 2002/3

8<sup>TH</sup> MAY 2002

09.30 – 15.30 SNH, Hope Terrace, Edinburgh

### Approved Minutes

#### Present (around table):

Ian Bainbridge (IB) (Chair) – SEERAD  
Liam Mathers (LM), SEERAD  
David Stroud (DAS) – JNCC  
Jim Reid (JR) – JNCC  
Catherine Gray (CG) – CCW  
Claire McSorley (CM) – JNCC  
Ben Fraser (BF) – EN  
Nigel Buxton (NB) – SNH

Jeremy Wilson (JW) - Scottish Environment  
Link  
Gwyn Williams (GW) – RSPB  
Geoff Audcent, (GA) – DEFRA  
Charlotte Johnston (CJ) – JNCC  
Andy Murdock (AM) – ABP  
Helen Baker (HB) (Secretary) - JNCC

#### Apologies:

Dave Burges (WWF - on behalf of Wildlife & Countryside Link), Andrew Clark (NFU), Peter Clement (EN), Nicola Donlon (NAW), Ian Enlander (EHS), Colin Hedley (CLA), David Mallon (SEERAD), James Robinson (WWT), Trevor Salmon (DEFRA), David Smallshire (DEFRA), Chris Spray (Water UK), Jill Thomas (NAW), Sian Whitehead (CCW). Also, from Mr. B. C. Deas, Chief Executive of the National Federation of Fishermen's Organisations and on behalf of the Scottish Fishermen's Federation, and Mr. M. Borwell of the UK Offshore Operators Association.

## 1 Introductions and apologies

- 1.1 The Chair welcomed Jim Reid, Head of the JNCC Seabirds and Cetaceans Team, Claire McSorley, the Seabirds and Cetaceans Seabird Ecologist, and Charlotte Johnston of the JNCC Offshore Natura unit.
- 1.2 The Chair also welcomed other new representatives and reiterated the conduct of the Group.
- 1.3 DEFRA had written to several marine sector organisations prior to this meeting to invite participation in the SWG. The National Federation of Fishermen's Organisations (NFFO), acting also on behalf of the Scottish Fishermen's Federation, had declined to send a representative, but requested that they be kept informed of the Group's discussions on marine issues. The UK Offshore Operators Association had also declined to send a representative, but offered to advise the Group on matters specifically relating to the oil and gas industries.

**Action Point 1: Secretariat to circulate all future SWG documentation to the NFFO, including papers from this meeting.**

## 2 Minutes of last meeting (13<sup>th</sup> March 2002, 2002/2)

- 2.1 Two changes were proposed to paragraphs 3.2 and to Action Point 4 under section 3. Secretariat to seek approval of these amendments by correspondence and finalise minutes.
- 2.2 A further general principle was proposed and agreed under section 3.5: organisers of surveys should anticipate sensitivity relating to access and data release, and clarify procedures with surveyors prior to survey activity.

## General items

### **3 Development of approaches for identifying areas for consideration as SPAs in the marine environment: presentation to the Group by JNCC Aberdeen**

3.1 The Chair gave a brief introduction to the process for identifying SPAs in the marine environment, stating that the High Court ruling on the Greenpeace case now places a statutory obligation on the UK to consider the protection of the marine environment under European law to the 200 nm limit. DEFRA are currently considering implementation of the Birds Directive in offshore waters, but within 12 nm responsibility lies with the devolved administrations. In assisting with the process, the Group will need to be content with the scientific approach that will inform the identification of marine SPAs. Over the last 18 months JNCC has been developing potential approaches.

3.2 JR gave an overview of the marine project within JNCC. An inter-agency/departmental project group is being established to take forward Natura in the UK marine environment, to which the SWG will provide scientific advice. The development of approaches to identifying marine SPAs has been divided into three areas:

- Extensions into the inshore marine environment to existing SPAs classified for breeding seabirds
- Inshore areas used by birds in the non-breeding season
- Marine areas (inshore and offshore) used by birds

### **3.3 Marine extensions to classified breeding seabird SPAs (presentation by JR)**

3.4 Relatively few data exist on the use of inshore waters by breeding seabirds. To investigate whether generic guidelines for establishing boundaries for inshore extensions to classified SPAs could be developed the JNCC co-ordinated research at six large seabird colonies in 2001. Behaviour of birds was recorded from boats along transects around colonies out to around 4 km from each. Behaviours were divided into two categories: non site-specific behaviours including bathing, preening and display, and site-specific behaviours including feeding. To develop a generic approach, the data on birds exhibiting non site-specific behaviours were analysed using a modelling technique called variography. Variography uses the spatial autocorrelation between pairs of observed data points at increasing distance apart to generate a modelled relationship. Interpolation techniques such as kriging utilise this relationship to create a regular grid of kriged density nodes over the survey area. These grid nodes were imported into a GIS and the distance to the nearest colony was calculated so that a mean kriged density could be calculated in distance bands at 200m intervals from the colony. JR presented an example of a variogram and several examples of the kriged density contours generated from the variogram and interpolation technique. There are two options for interpretation of the data to guide boundary definition: (i) utilising the number of birds within each distance band to select a numerical threshold, and (ii) utilising the change in density between distance bands to generate a threshold.

3.5 The analysis of data from the six colonies studied in 2001 shows that generic thresholds for some species could be generated to guide boundary determination. Such boundaries would protect waters that will meet the needs of species for non site-specific behaviours, but would not define appropriate inshore feeding areas (this will effectively be achieved in the third strand of the marine project). JR suggested that effective boundaries might possibly be 1 km from shore for auks and 2 or 3 km from shore for gannets.

3.6 Future work is needed as follows: identifying and agreeing thresholds and boundaries (based on numbers and densities), consideration of species for which current data are insufficient, and additional targeted fieldwork (possibly including satellite tracking of some species).

### **3.7 Discussion within the Group**

- 3.8 Data insufficiency was raised as a concern. It was confirmed that for some species data are genuinely lacking, in some cases due to timing of fieldwork (diurnal and seasonal), but for others, e.g. terns, immediate inshore waters around colonies are sometimes used very little. The generic approach was questioned with a suggestion that boundary development should be more site-specific. However, data are simply not available for the majority of colonies in the UK. The cost of hiring the right kind of boat for a single colony survey is around £10K, with staff costs additional. SNH have done a review of site-specific data with some additional analysis and this suggests that use of inshore waters by each species is highly variable at a fine spatial scale both within and between years, but that course scale use was less variable. Determination of site-specific boundaries would be highly complex, and in most cases data are few. SNH agreed to circulate their reports within the Group. JR reiterated that the generic approach currently being developed by JNCC would be widely applicable, but that it will not include feeding areas - these will effectively be developed under the third strand of the project. Areas identified for consideration as offshore SPAs may well overlap with areas identified for extending colony SPAs.
- 3.9 The robustness of the chosen interpolation technique was questioned, with a query as to what other interpolation methods had been tested. JNCC chose the kriging method as a literature review of possible methods indicated that for the kind of data available this would be the most robust approach. The affect of colony size on these analyses was queried, but has yet to be tested. JR agreed, with the consent of the CAs, to table the report of this work at the next meeting of the Group.

**Action Point 2: SNH to circulate to the Group its reports on behaviour of seabirds around specific colonies.**

**Action Point 3: Group to discuss extensions to breeding seabird colony SPAs at September meeting – Secretariat to circulate JNCC report by 6<sup>th</sup> September 2002.**

### **3.10 Inshore areas used by birds in the non-breeding season (presentation by JR)**

- 3.11 The focus of this strand of the marine project is provision of SPAs for divers, grebes and seabirds in UK inshore waters during the non-breeding period. Data are available from two main sources: aerial surveys and the Wetland Bird Survey (WeBS). Aerial surveys are recent with no long-term data sets available, but coverage is good for certain species. WeBS data are limited in geographical coverage and consistency for species using open coastal waters, but an advantage of WeBS is that it is a long-term dataset. Using these data JNCC is investigating two possible, non-exclusive, approaches: application of the SPA Guidelines to numbers of birds detected, and analysis of densities (again using spatial interpolation) and development of density-based thresholds. However, unlike extensions to colonies the definition of boundaries for non-breeding species will need to take account of local habitat characteristics (bathymetry and landform) and so a generic approach might be unlikely. JR illustrated the type of data available from aerial surveys and WeBS.

### **3.12 Discussion within the Group**

- 3.13 The issue of data sufficiency was raised, especially in relation to periods of severe weather. It was suggested that other data might also be available, for example from specific studies and from local bird reports. However, data quality is an issue and data originating from outside of national schemes would require validation prior to use. JR requested that the Group send him information about other data sources known to them. Following this JNCC would evaluate

data availability and identify gaps. Despite additional data being available the number of annual surveys available for many sites will be few and determination of regularity of use will be problematic. As it is unlikely that in the short-term there will be resources available for new surveys it was suggested that all good quality data available for a site should be used to help determine qualification and boundaries.

- 3.14 The Group requested clarification of the timetable for completing this strand. JR indicated that this would come from the JNCC project group in the near future. Concern over timing was expressed due to the increasing pressure on the marine environment from development. It was agreed that the minutes from this meeting be sent to the JNCC Marine Natura project group.

**Action Point 4: JNCC Aberdeen to produce a list of data held and in use for non-breeding waterbirds in inshore waters, and circulate this list to the Group for information.**

**Action Point 5: Group members to inform JNCC Aberdeen of any sources of data (outside of national schemes) for non-breeding waterbirds in inshore waters.**

**Action Point 6: Secretariat to circulate minutes of this meeting to the JNCC Marine Natura project group once established.**

**3.15 Marine areas (inshore and offshore) used by birds (presentation by JR)**

- 3.16 JNCC has just completed a report on implementation of the Habitats and Birds Directives in UK Offshore waters (JNCC Report 325: Natura 2000 in UK Offshore Waters). This report will be circulated widely for consultation on 9<sup>th</sup> May 2002 (including to members of the SWG) and will be published on the JNCC website on the same day (<http://www.jncc.gov.uk/Publications/JNCC325/intro325.htm>) - a copy was tabled at the meeting.

- 3.17 It evaluates currently published approaches, in particular:
- Generic foraging ranges around colonies
  - Identification and designation of known feeding habitats at sea
  - Modelling data from ESAS (European Seabirds at Sea database)

- 3.18 ESAS comprises data on presence of seabirds at sea collected over the last 20 years throughout northwest European waters. Data are collected using standard methods at all times of the year, although the timing of surveys is opportunistic according to boat availability (bird behaviour is not recorded). Surveys typically start around 2 km from shoreline and so data are lacking from near-shore waters. There is temporal and spatial variation in coverage, but analysis has shown that there is a high level of consistency in distribution patterns (although the scale at which surveys are made limits these analyses). Scale is an issue in using the ESAS data for boundary definition, but these data are the best available.

- 3.19 JNCC advocate the analysis of ESAS data, using spatial interpolation to interpolate densities from which concentrations could be identified and thresholds developed. This method would not preclude the identification of areas in inshore waters. There are two options for interpreting the results of the ESAS analysis to provide guidelines for selecting areas: an approach similar to the Marine Classification Criterion (MCC) (Skov *et al.* 1995), and a density analysis (slope analysis). JNCC is currently investigating the potential in these options. JNCC will aim to produce guidelines for selecting offshore SPAs by March 2004, given appropriate resources.

### **3.20 Discussion within the Group**

- 3.21 Comment was made on the difficulty of understanding the ESAS data and whether they were sufficient for site selection purposes. JR commented that ESAS survey coverage was both good and regular and that despite some areas having few data he was confident that they would allow identification of 'hot-spots'. Analysis would include examination of seasonal usage and this will identify those areas, if any, where data are lacking.

### **3.22 General discussion on marine issues**

- 3.23 The Chair thanked JR and JNCC marine staff for presenting the summary of progress in developing the approach to the selection of marine SPAs. It was noted that circulation of written reports would be beneficial and JNCC agreed to do so at the appropriate times. JNCC reiterated that it would welcome comments on the presented information at this meeting and all future reports.
- 3.24 It was commented on that the link between the three strands of the project was unclear, but that clarity was essential in order to allow early assessment of the potential completeness of the derived marine SPA network. Concern over timing was expressed given development pressures in the marine environment and it was suggested that the project focus on utilising data already available rather than waiting for the collection of additional data. Comment was made that the process of classification, which given the complexity of government responsibility in the marine environment, required clarification. However, this will fall to the JNCC marine Natura project group.

**Action Point 7: JNCC (JR/CJ) to brief the Group on the Offshore Natura 2000 European Seminar (London, 17<sup>th</sup> & 18<sup>th</sup> June 2002) and the outcome of the consultation on JNCC Report 325 (Natura 2000 in UK Offshore Waters) at the September meeting.**

## **4 'Minimum 50' rule and consideration of SPAs for Smew (briefing paper from JNCC/WWT)**

- 4.1 DAS introduced the paper. The Group agreed to uphold the 'minimum 50' rule, but recognised that there may be a few exceptions where sites supporting low numbers of non-breeding birds would add to the conservation of a given species, especially in contributing to range maintenance. Such cases will be reviewed and agreed when necessary.
- 4.2 For the specific case of Smew it was agreed that severe weather was an important consideration as more birds occur in the UK in harsh winters. This has a direct bearing on the numbers of birds using UK waterbodies. The Group agreed that other data sources outside of WeBS might be useful for assessing Smew numbers. This briefing will be published on the JNCC website.

**Action Point 8: EN to collate additional data on Smew and present these at the January 2003 meeting at which the Group will agree on whether any areas meet the guidelines for selection.**

**Action Point 9: Group to discuss in the medium-term the concept of conservation value of small populations.**

## **5 Passage Waders (update paper from JNCC)**

- 5.1 DAS highlighted the issue associated with passage wader populations and site designation. DEFRA confirmed that they had sought legal opinion on protection afforded to a species on

an SPA during the passage period. They agreed to circulate this opinion to the Group. Several issues were raised in discussion: the problem of mixed biogeographical populations of one species when one population is Annex I and the other not, practical implications of site management and establishing appropriate site conservation objectives, and whether sites of importance only during passage periods had been successfully identified and classified. It was agreed that further consideration of this issue was needed when legal opinion was available, but that a list of species and sites where passage populations require further consideration be made. Any decisions on this issue would be detailed in the Annual Report of the Group.

This update will be published on the JNCC website but without the Annex as this information is not yet accepted for publication.

**Action Point 10: DEFRA to circulate legal opinion on passage species to the Group ASAP.**

**Action Point 11: JNCC to co-ordinate production of a list of species and sites for which further consideration during the passage period will be necessary by January 2003 meeting.**

## **6 Winter Gull Data Analysis (update paper from JNCC)**

- 6.1 HB introduced a summary of the preliminary results of the 1993 BTO Winter Gull Roost Survey. The Group agreed that, as the next survey would be in 2004, further consideration of wintering gulls would be deferred until after the results became available. However, the Group agreed that it would be worthwhile reviewing the proposed methods for the next survey.

This update will be published on the JNCC website.

**Action Point 12: Secretariat to request full report of 1993 survey from EN and proposed methods for the 2003/04 survey from BTO and circulate within the Group ASAP.**

## **7 Winter Raptors (update from JNCC)**

- 7.1 DAS informed the Group that JNCC has sought advice from the BTO on data collection and collation for non-breeding raptors and will circulate this to the Group when it becomes available.

**Action Point 13: JNCC to circulate BTO report on non-breeding raptors when available.**

## **Species items**

### **8 Ring Ouzels (briefing paper from EN/JNCC/RSPB)**

- 8.1 BF introduced the briefing on Ring Ouzels outlining biogeographical population status. From preliminary work he suggested that it is unlikely that any area in the UK held more than 1% of the biogeographical population and that consideration of the species would probably have to be made under Stage 1.4 of the selection guidelines. The Group agreed with the briefing's analysis of biogeographical populations, but expressed concern over the breadth of the population estimate and suggested that a check on estimates for Norway and Sweden be made. The question of suitability of site-based protection for the species was raised, given that it is dispersed. However, including Ring Ouzel as a qualifying species in appropriate large upland SPAs would provide benefit via site conservation objectives, but outside of this it is a species for which wider countryside measures are needed. It was suggested that any

already classified SPAs with more than 100 pairs are considered for the species. The RSPB has already done some work on Ring Ouzels, in collaboration with the Ring Ouzel Study Group (ROSG), and agreed to approach the ROSG for additional data. This briefing will be published without tables on the JNCC website.

**Action Point 14: RSPB to approach Ring Ouzel Study Group for additional data and supply these to EN/SNH/CCW as appropriate when available.**

**Action Point 15: EN to find out if better Ring Ouzel population estimates are available from Norway and Sweden and report back to Group.**

**Action Point 16: EN/SNH/CCW to collate Ring Ouzel data and determine whether any high density/large population areas can be identified. Each agency to report back to the Group in January 2003.**

## **9 Bilateral discussions**

- 9.1 **Northern Ireland** – no report.
- 9.2 **Wales** – CCW is due to meet with RSPB in July 2002 to discuss data for a number of inland Chough sites. CCW will report on discussions at the September meeting. These discussions were postponed earlier in the year due to a challenge to the classification of Mynydd Cilan SPA for Chough: a site that includes cultivated land.
- 9.3 **Scotland** – SNH are currently conducting Capercaillie and Hen Harrier surveys. RSPB (Richard Evans) is reviewing previous comments and will seek future discussions with SNH.
- 9.4 **England** – no discussions. EN is reviewing proposals for new sites and extensions and categorising them for SWG consideration or future bilateral discussions with RSPB.

## **10 Review of work programme**

- 10.1 The Group agreed amendments to the work programme, which will be revised and circulated by the Secretariat prior to the September meeting.

## **11 Any other matters arising from the minutes of the last meeting**

- 11.1 The Group agreed to add consideration of Little Egret to the work programme with initial consideration in May 2003.

## **12 Any other business**

- 12.1 The Secretariat informed the Group that the JNCC website is undergoing considerable redevelopment and this has delayed publication of the SWG's papers. Publication is expected in late June/early July and Members would be alerted by e-mail.

## **13 Dates and venues of next meetings**

- 13.1 24 September 2002 at JNCC, Monkstone House, Peterborough.
- 13.2 29 January 2003 at WWT, Barn Elms Wetland Centre, London.

### **Attachments:**

Revised Work Programme (Plan 5 July 02)

# UK SPA SCIENTIFIC WORKING GROUP

MEETING 2002/3, 8<sup>TH</sup> MAY 2002

## Action Point Summary

(In Chronological order and not minute order, batched by work period or future meeting, lead organisation underlined)

**Actions from this meeting to be discharged prior to September 2002 meeting (see minutes of last meeting also): (Papers to be submitted to secretariat by 6 September 2002)**

Action Point 1: Secretariat to circulate all future SWG documentation to the NFFO, including papers from this meeting.

Action Point 2: SNH to circulate to the Group its reports on behaviour of seabirds around specific colonies.

Action Point 3: Group to discuss extensions to breeding seabird colony SPAs at September meeting – Secretariat to circulate JNCC report by 6<sup>th</sup> September 2002.

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Action Point 15: EN to find out if better Ring Ouzel population estimates are available from Norway and Sweden and report back to Group.

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Action Point 16: EN/SNH/CCW to collate Ring Ouzel data and determine whether any high density/large population areas can be identified. Each agency to report back to the Group in January 2003.

**General actions from this meeting for future consideration:**

Action Point 9: Group to discuss in the medium-term the concept of conservation value of small populations.