

UK SPA & RAMSAR (AVIAN) SCIENTIFIC WORKING GROUP

PROGRESS REPORT

JANUARY 2010 – OCTOBER 2011

SUMMARY

1. The UK SPA & Ramsar (Avian) Scientific Working Group (SPAR SWG) was established following the publication of the 2001 SPA Review to assist government in further development of the SPA and Ramsar networks. It has made major progress in providing the scientific rationale needed to support development of these networks, and is currently supporting a further targeted review of the SPA network.

2. This is the 8th SPAR SWG report. It includes all activities from January 2010 to October 2011, during which the SWG met on six occasions. The main achievements were:
 - completion of the BTO project supporting Phase 1 of the SPA Review – this was overseen by the SWG and resulted in:
 - (i) up-dated reference population estimates for relevant bird species;
 - (ii) site-level population counts for relevant bird species;
 - (iii) short reports for five species consequential to the Irish ECJ-judgment;
 - (iv) a decision-tree and associated information for cropped habitats.
 - progression of a Site Provision Index, including completion of a questionnaire to provide an independent assessment of the extent to which index values might reflect suitability for site-based conservation;
 - development of a decision-making framework to aid consistent review of SPA suites;
 - production of an index of key judgments reached by the European Court of Justice relating to the selection and management of SPAs;
 - completion of a stock-take of progress with implementation of recommendations presented in the 2001 SPA Review;
 - progression of work related to SPA provision in the marine environment, including field survey, data analysis and reporting on possible SPA boundary options.

3. A key purpose of this report is to set out formal recommendations from the SPAR SWG to the Natura 2000 & Ramsar Steering Committee: two of these were made during the reporting period:
 - **the SPAR SWG recommends that in principle a full review of the SPA network should be planned to commence in about 2020;**
 - **the SPAR SWG recommends that the ‘during the non-breeding season’ approach to calculating non-breeding waterbird assemblages on SPAs is adopted as standard throughout the UK.**

4. The main components of the future work programme for the SWG relate to activities that will complete Phase 1 of the on-going SPA & Ramsar Networks Review. The SWG will continue to provide technical support for this review and to act as the Technical Advisory Group focusing on directing and quality assuring the work. Key tasks include:
 - commenting on and approving work associated with the completion of the Site Provision Index;
 - finalising the decision-making framework and use of this to assess the adequacy of UK SPA network provision for relevant species;
 - writing and approving the content of the final Phase 1 report pending submission to the Executive Steering Group.
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INTRODUCTION

1. The SWG is a consultative group that was established in November 2001, by the Department for Environment, Food and Rural Affairs (Defra) and the devolved Government administrations. It exists to assist these administrations and the statutory nature conservation agencies in further developing the SPA and Ramsar (Avian) networks in both the terrestrial and marine environments, including advising on UK-scale scientific and technical issues regarding these networks, advising on and promoting the coherent management of these networks, and monitoring of sites. Formal Terms of Reference (Appendix 1) were established at the inauguration of the SWG (see 2001-2002 Annual Report, page 12)¹ and revised in 2004 (see Appendix 1 of the 2004 Annual Report)².

2. The SWG comprises representatives from UK Government departments, devolved Government administrations and their statutory nature conservation agencies across the UK, the Joint Nature Conservation Committee (JNCC), and scientists from the voluntary conservation sector and other stakeholder groups, such as land-owners and managers, the water industry, marine and business sectors. The inclusive list of member organisations is:

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|--|---|
| Government Administrations | <ul style="list-style-type: none"> • Department for Environment, Food and Rural Affairs • Scottish Government • Welsh Government |
| Statutory nature conservation agencies | <ul style="list-style-type: none"> • Countryside Council for Wales • Joint Nature Conservation Committee • Natural England • Northern Ireland Environment Agency • Scottish Natural Heritage |
| Other organisations | <ul style="list-style-type: none"> • ABP Marine Environmental Research • Country Land & Business Association [<i>also acting on behalf of Country Land & Business Association in Wales and the Scottish Rural Property and Business Association</i>] • Forestry Commission GB • National Farmers Union [<i>also acting on behalf of Undeb Amaethwyr Cymru/Farmer's Union of Wales and National Farmers Union Scotland</i>] • National Federation of Fishermen's Organisations (corresponding member) • Royal Society for the Protection of Birds • Scottish Environment Link • Water UK • Wildfowl & Wetlands Trust • Wildlife & Countryside Link |

3. The SWG sits within a network of fora for the consideration of Natura 2000 issues:

¹ via <http://www.jncc.gov.uk/PDF/ar2001-2002.pdf>

² see http://jncc.defra.gov.uk/pdf/2004_Annual_Report_approved_version.pdf

- bilateral discussions between NGOs, devolved Government administrations and the statutory nature conservation agencies;
- UK Natura 2000 & Ramsar Forum
- UK Natura 2000 & Ramsar Steering Committee (N2KRSC);³
- UK Marine Biodiversity Policy Steering Group; (UK MBPSG)
- Marine Protected Areas Technical Group.

It provides advice and recommendations to the N2KRSC and the Marine Biodiversity Policy Steering Group, as well as acting on issues identified by them.

4. The SWG typically meets three times per year. JNCC provides the Secretariat and hosts an internet website⁴ where approved minutes of meetings, annual reports, and finalised briefings are published.
5. The Terms of Reference (Appendix 1) include the production of an annual report. The role of this is to summarise issues considered by the SWG; to make recommendations to and seek guidance from the N2KRSC and/or the UK MBPSG; and to outline the main components of the future work programme (Appendix 2).

³ see <http://www.defra.gov.uk/rural/protected/internationally-designated-sites/>

⁴ see <http://www.jncc.gov.uk/page-1770>

PROGRESS MADE DURING JANUARY 2010 – OCTOBER 2011

Meetings, Reporting and Membership

1. The SWG met on six occasions during the reporting period:
 - 27th January, 19th May, 8th September and 1st December 2010;
 - 28th February 2011 and 28th June 2011.
2. Approved minutes of meetings and associated papers were uploaded onto the UK SWG website⁴.
3. The membership list for the SWG (Appendix 3) was updated. As agreed with the N2KRSC, the Forestry Commission was invited to provide representation on the SWG at the start of 2011.

Feedback on 2008 & 2009 SWG Report

4. The N2KRSC reported that they had accepted the 2008 & 2009 SWG Report. The two recommendations therein, regarding eider populations and the publication of methodological and other work related to marine SPAs, were noted and passed to the UK MBPSG for further consideration. They subsequently accepted these by correspondence.

SPA Review

5. The main item progressed by the SWG was Phase 1 of the 2010 Review of the UK SPA Network (SPA Review) (Appendix 4). This involves undertaking a targeted review of selected elements of the current UK network of terrestrial and coastal Special Protection Areas (SPAs) in order to ensure that UK obligations under Article 4 of the EU Birds Directive are met.
6. The geographical scope of the Review is limited to the terrestrial and coastal environments of the UK, with Gibraltar having been invited to undertake its own review along similar lines. SPA provision within the marine environment has continued to be examined through a separate programme of work⁵, although an overview of the whole network is anticipated in due course. The five main issues that the SPA Review intends to address are:
 - species that the 2001 SPA Review stated would be revisited in view of the lack of data at the time of that review;
 - scarce species for which periodic national surveys have been undertaken since the 2001 SPA Review;
 - inclusion of cropped habitats within the SPA network;
 - consideration of all Annex I species consequential to the 2007 ECJ Judgment of the EC Commission v Ireland Case (C-418/04) (Irish ECJ-judgment);⁶
 - updating assessments of species SPA suites and improving presentation of SPA-related web-information.

⁵ see <http://www.jncc.gov.uk/page-1414>

⁶ see [ECJ Judgment C-418/04](#)

7. The SPA Review is divided into three phases. Phase 1 is largely science-based and has been the focus of SWG activity during the reporting period in their role as the Technical Advisory Group for the review. Phase 2 will involve the consideration and application of principles and guidelines established during Phase 1, whilst Phase 3 will involve necessary action and revision of relevant documentation.

BTO project

8. A major part of the SPA Review Phase 1 work has been progressed through a Defra-funded contract undertaken by the British Trust for Ornithology (BTO). The SWG acted as the main scientific advisor to this project. The BTO contract was completed according to timetable and the SWG completed their endorsement of the final outputs at their June 2011 meeting. The SWG noted that BTO had proved to be a very willing and competent contractor. The outputs, which are as detailed below, included:
 - a final summary report;
 - up-dated reference population estimates for relevant bird species;
 - site-level population counts for relevant bird species;
 - short reports for five species consequential to the Irish ECJ-judgment;
 - a decision-tree and associated information for cropped habitats.

BTO final report

9. The final report produced by BTO⁷ summarised the work they had undertaken and explained all of the technical outputs. This will form the basis for relevant sections of the final report for Phase 1 of the SPA Review (see paragraph 26).

BTO biogeographic and UK / GB / all-Ireland population estimates

10. BTO compiled an up-to-date set of biogeographic and UK / GB / all-Ireland reference population estimates in spreadsheet format. New values were obtained for 185 of the 193 breeding / non-breeding bird populations requested. The missing values were for non-breeding populations of Hen Harrier and Merlin (UK/ GB/ all-Ireland) and Little Gull (UK/ GB). An explanation was provided as to why these could not be determined and how they might be best surveyed in the future.
11. The spreadsheet detailed the units involved (individuals, pairs, etc.), the year/range of years for the estimate, the reference/source, the previous estimate, and other details. For those species that had annual population estimates available, the reference population estimate was derived either by:
 - (i) taking an average over a five-year period – the primary time window was 2003-2007, but data from other years were used where this was justified; or
 - (ii) using the latest year – this applied to those species that had highly reliable and precise data, and which showed a consistent and significant change over the five-year period.

⁷ [A review, collation and spatial analysis of data in support of a targeted review of the current UK network of terrestrial and coastal Special Protection Areas for birds \(SPAs\) - WC0761](#)

A range of population estimates was provided for certain breeding waders, using the maxima and minima from two available methods, i.e. the new 'BBS distance-analysis' approach of Newson *et al.* (2008)⁸ and the original approach of O'Brien (2004)⁹.

12. The intention is that BTO will publish these reference population estimates in December 2011 via the Avian Population Estimates Panel (APEP), which is the authority by which population estimates for all regularly-occurring UK bird species are published.

BTO site-level count data

13. BTO provided a series of site-level bird counts in database format. This covered 43 populations across 39 species. For certain populations, the suitability of available site-level data was judged to be inadequate, or possibly so, for the purposes of the SPA Review. This included: non-breeding Hen Harrier, Merlin and Twite; breeding Honey Buzzard, Osprey, Red Kite, Ring Ouzel, Scottish Crossbill, Spotted Crake, and Twite (except the south Pennines population).
14. Details provided in the database included, e.g. the units involved (individuals, pairs, etc.), the year or season or specific date, the source, the unit or aggregate site name and code, and the site type and location. Each population dataset was summarised to show how many rows of data it contained, the number of locations, the range of years covered, the principal source(s), and the type of data (data units). Suggestions were given as regards subsequent use and if the dataset was considered incomplete.
15. The majority of the data were already in the public domain and can be shared freely. For those that were confidential, an agreement was made whereby all confidential site-level data would remain held securely at the BTO and made available on request by members of the SWG for SPA Review purposes.

BTO Ramsar data

16. BTO also assembled a range of site-level bird counts in spreadsheet format for Ramsar purposes. This was primarily aimed at updating Ramsar Information Sheets (RIS) and better aligning the data underpinning Ramsar sites and SPAs. In addition, this might support a wider review of qualifying features on Ramsar sites. Although BTO compiled a large number of counts, some further work is required to complete this exercise because:
 - (i) it was unclear whether qualifying features on Ramsar sites were to be revised as a result of updated national population estimates becoming available; and
 - (ii) the N2KRSC had agreed to defer the RIS updating exercise until after the Ramsar CoP11 in April 2012; i.e. the requirements of the data assembly were not entirely clear.

⁸ Newson, S.E., Evans, K.L., Noble, D.G., Greenwood, J.J.D. & Gaston, K.J. (2008) Use of distance sampling to improve estimates of national population sizes for common and widespread breeding birds in the UK. *Journal of Applied Ecology* 45, 1330-1338.

⁹ O'Brien, M. (2005) Estimating the number of farmland waders breeding in the United Kingdom. In: Thorup, O. (Ed.) *Breeding Waders in Europe 2000. International Wader Studies No.14*. International Wader Study Group, UK.

BTO reports on species related to the Irish ECJ-judgment

17. BTO produced brief reports on five UK species consequential to the Irish ECJ-judgment¹⁰. These covered Crane, Kingfisher, Montagu's Harrier, Smew and White-tailed Eagle, as Annex I species occurring in the UK with established populations (or regularly occurring) and for which there is no SPA provision.
18. In addition to background information, each report sets out the reasons behind the current lack of SPA provision for the species, details of its current UK status, key sites and links with the existing SPA network, and a discussion on approaches that might be considered for possible inclusion of the species within the SPA network. For White-tailed Eagle, Montagu's Harrier and Crane precise information on the location of nesting sites was provided in password-protected confidential annexes.
19. The Smew report highlighted the fact that, although this species occurs regularly in the UK, no SPAs have been selected for it because its levels of occurrence, even at sites with the largest numbers, fall significantly below the threshold of 50 individuals which has long been established by the statutory nature conservation agencies as the minimum number in selecting sites for wintering waterbirds¹¹. The SWG therefore agreed to prepare an options paper on the subject in light of the Irish ECJ-judgment for future consideration by the Executive Steering Group.

BTO cropped habitats decision-tree

20. BTO created a cropped habitats decision-tree with the aim of guiding decisions about the feasibility of including cropped habitats within the SPA network. The work built upon the Cropped Habitats Information Project (CHIP) project previously undertaken by the SWG. It was fully documented in a set of accompanying notes and supplemented by a series of ten case studies aimed at testing its effectiveness. This exercise provided a valuable insight on how the information on cropped habitats can be used and the SWG agreed that the insights gained should be incorporated into the Decision Framework being developed for the SPA Review (see paragraph 24).

Site Provision Index

21. During 2010 – 2011, further progress was achieved with the Site Provision Index (SPI). This work was led by JNCC and RSPB on behalf of the SWG and intends to provide an objective assessment of the suitability of site-based conservation provision and an indication of the degree of representation of particular bird species within the SPA network. It is a central component of the Decision Framework for the SPA Review (see paragraph 24).
22. A Delphi-style questionnaire was undertaken to provide an independent assessment of the extent to which SPI values might reflect suitability for site-based conservation. Expert respondents were asked to assess what proportion of the national (GB) population of a species they would expect, on the basis of their best expert judgement, the UK SPA network to contain for a selection of Annex I and migratory species. A total of 53 respondents fully completed the questionnaire, with evaluations of individual

¹⁰ this concluded that "it is clear from Article 4(1) of the Birds Directive, as interpreted by the Court, that if species listed in Annex I occur on the territory of a Member State, it is obliged to define SPAs for them"

¹¹ see section 4.1.2 of the 2001 SPA Review - http://jncc.defra.gov.uk/PDF/UKSPAVol_1.pdf

species ranging from 38-53 in number. The following general conclusions were reached:

- there was broad agreement in judgements as to the extent to which a species would be expected to have high site-based (SPA) provision;
- there was no overall difference in overall mean assessments for all species made by respondees from statutory agencies with those from NGOs;
- there was a close linear relationship between calculated SPI values and average 'best judgement' estimates of the proportion of national populations desirable within the SPA network;
- the SPI approach summarises ecological information in a succinct way that makes it more accessible to decision makers and represents a promising tool to help test the sufficiency of a protected area network for particular species of birds.

23. A formal paper was initiated for submission to a peer-reviewed scientific journal. In addition to background information on the SPI, this covers the index development, testing and results, and a discussion of the choice of index elements and interpretation of index values.

Decision Framework to review SPA suites

24. During 2010 – 2011, the SWG made substantial progress with the development of a Decision Framework to aid the consistent review of SPA suites. This will provide an objective means of indicating whether a particular bird species is under-represented within the SPA network and suggesting options for dealing with this. It will, therefore, form a core component of the current SPA Review. Central to the Framework is the Site Provision Index (see paragraphs 21-23); it also includes an assessment of cropped habitat requirements based on the related work undertaken by BTO (see paragraph 20). The process to test (by way of worked examples for a range of species), develop and set out accompanying guidance for the Framework is ongoing. At the end of Phase 1, it is expected that the Framework will function as far as (but not including) the site selection process, which is an operational matter for the statutory nature conservation agencies to consider in Phase 2 of the Review.

European case law index

25. During 2011, the SWG produced an index of key judgments reached by the European Court of Justice relating to the selection and management of SPAs under Article 4 of the EU Birds Directive. This comprised a spreadsheet with three indices:

- a 'case index' – this lists all of the cases that have been indexed, together with the main articles of the Directive(s) for which the judgment provided interpretation;
- a 'key word index' – this classifies the cases by topic (e.g. site selection);
- a 'species index' – this identifies cases where individual bird species are mentioned.

The index represented one of the outputs from Phase 1 of the SPA Review. It has been published via the JNCC web site¹². No attempt was made to interpret any of the judgments.

¹² Index to key rulings of the European Court of Justice, http://jncc.defra.gov.uk/docs/spa_ECJcasesindex.xls

Phase 1 final report

26. During 2010 – 2011, the SWG initiated work to produce a final report covering Phase 1 of the SPA Review. This is an important document which will summarise the work done by the SWG since its inception and set out key advice for use by the Government Administrations and statutory nature conservation agencies in Phase 2 of the Review. A series of section headings were agreed upon, which will cover:

- (i) the historical perspective;
- (ii) progress since the 2001 Review;
- (iii) data issues;
- (iv) reviewing of the network (SPI and Decision Framework);
- (v) UK outputs from Phase 1;
- (vi) next steps.

Appendices are planned to cover the ECJ case law indexing, SPI values, reference population estimates used, information on cropped habitat species, the ECJ-species reports, and the BTO project report. The first complete draft of the Phase 1 final report is timetabled for November 2011.

Peer review of SPA Review Phase 1 outputs

27. Plans to undertake an independent peer review of the outputs from Phase 1 of the SPA Review were discussed during the 2010 SWG meetings. The aim of this was to ensure that the outputs were scientifically robust. Although the SWG would play an important role in reviewing and quality assuring outputs from Phase 1, they could not claim to be entirely impartial. It was agreed that this work should focus on the scientific aspects of the Decision Framework (see paragraph 24) and (if not sent for formal publication) the Site Provision Index. There was also general agreement that the final Phase 1 publication ought to be subject to independent peer review. The specification for the peer review was progressed and awaits completion of the Decision Framework and final Phase 1 publication before a contract can be let, probably in 2012.

Scope of the SPA Review

28. At the February 2011 SWG meeting, the scope of the SPA Review was discussed. This highlighted the desirability of reviewing SPA provision for all relevant species. The task would involve two additional groups of species:

- *those migratory species for which no SPAs had been selected* – these included mostly abundant and dispersed passerines, such as larks, buntings and warblers, for which there was no expectation that the decisions reached on these in the late 1990s would have changed;
- *those migratory and/or Annex I species for which SPAs had been selected but are not currently included within the Terms of Reference for the Review* – these included a small number of species that were not selected for review, which could be grouped as:
 - (i) limited-range wintering goose populations;
 - (ii) a few wintering duck species;
 - (iii) a few rare breeders; or
 - (iv) a number of breeding seabird species for which data sources on contemporary numbers readily exist.

29. It was concluded that the small amount of additional work to briefly review these species would yield significant policy benefits, i.e. it would mean that a fully contemporary assessment could be presented for use in coming years and ensure that the UK could continue to provide good explanation that the sites selected within the SPA network were the most suitable. It was agreed that supporting information would be collated and a proposal produced for consideration by the Executive Steering Group.

Progress with implementation of 2001 SPA Review

30. At the May 2010 SWG meeting, JNCC provided an update on the stock-take of progress with implementation of recommendations presented in the 2001 SPA Review. This was concerned with outstanding SPA (re-)classifications in terms of sites and qualifying species. Only a small number of potential SPAs listed in the 2001 SPA Review had not been classified or had been only partially classified. There were, however, around 100 sites that had not yet been re-classified to take into account changes recommended in the 2001 SPA Review, i.e. there was a mismatch between the listed entities on the SPA citation (as used for Natura 2000 data forms) and those given in the 2001 SPA Review publication (as presented on the JNCC SPA web pages). The number of species affected by this was around one hundred. Most of the discrepancies were because prior to 2001, assemblage components were not identified either on the SPA citation or Natura 2000 data form.

SPA web-information

31. At its May 2010 meeting, the SWG received an update on planned changes to improve and update the SPA species and site accounts as presented on the JNCC website. This work is required partly because (at this date) 70 SPAs had been classified or re-classified subsequent to the publication of the 2001 SPA Review, affecting 85 out of 160 species accounts. In addition, presentation of existing SPA site and species web-information is confusing because it is available in two forms: (i) as per the 2001 SPA Review; and (ii) as per the official Natura data forms. The planned work aimed to simplify matters by presenting one set of information containing the latest information related to the legal qualification of each SPA. Following the May 2010 meeting, consultation with Country Agencies resulted in some changes to the detail of the proposed structure of the anticipated new site account formats. Although resource constraints had meant that it had not been possible to progress this work before the June 2011 SWG meeting, the Group was advised that the work had been timetabled to take place before November 2011.

Future timing of SPA Network review

32. At the December 2010 SWG meeting, future review of the SPA network was discussed. It felt there was clear merit in setting a target date for this as it would:
- enable a coordinated approach across the UK;
 - allow the statutory nature conservation agencies and other bodies to plan in terms of SPA implementation and the timing of delivery of relevant bird surveillance data and other information;
 - set out the UK Government's long-term intent to the European Commission and others;
 - ensure the SPA network remained underpinned by contemporary information, noting that within a decade some elements of the network would not have been reviewed for 25 years;

- recognise that there is clear evidence that certain SPA qualifying species have changed substantially in abundance and range and further significant changes are anticipated (as illustrated by findings of the CHAINSPAN project – see paragraphs 33-36).

The SWG agreed to seek the views of the Natura 2000 & Ramsar Steering Committee by making a formal recommendation that in principle a full review of the SPA network should be planned to commence in about 2020.

RECOMMENDATION 1

The SWG recommends that in principle a full review of the SPA network should be planned to commence in about 2020.

CHAINSPAN project

33. Throughout 2010 – 2011 the SWG received regular updates on progress with the CHAINSPAN project (Climate Change Impacts on Avian Interests of the SPA Network). This Defra-funded project was undertaken by BTO to help assess the resilience of the UK SPA network to projected climate change. At the June 2011 SWG meeting BTO gave a presentation on the findings and final recommendations of the project. It was based on a modelling exercise, which related density of birds to recent climate with the aim of predicting bird density under future climates.
34. The main results of CHAINSPAN were:
 - many of the bird-climate models were found to have fairly low predictive power in describing spatial patterns of bird density;
 - species groups differed in terms of their projected vulnerability to climate change and significant latitudinal shifts in species composition were projected at many sites;
 - the most vulnerable species were northern-breeding seabirds and northern-breeding terrestrial species;
 - many upland species showed declines;
 - populations of many wintering waterbirds increased as a result of milder winters;
 - diving wintering waterfowl were however more likely to decline in abundance;
 - many southern species increased, including southerly-distributed heathland species;
 - although inter-tidal and freshwater sites are likely to continue to support important bird populations, their species are projected to change substantially.
35. The project concluded that the current SPA network appears to be relatively resilient to projected future climate change. However, the spatial distribution, abundance and species composition of the network is likely to be significantly different in the future. The SWG noted that it was very important, given the strength of the model fits, to highlight the caveats that went with the results to minimise the temptation to 'over-use' the results – although overall trends could be treated with some confidence, changes at individual sites should be treated with caution.

36. The following key messages were identified by the SWG:
- most SPAs will remain important in the foreseeable future, even if in some cases it will be for a different species complement;
 - there will be some winners and some losers amongst the range of bird species involved;
 - there is considerable potential for site-based management to increase SPA resilience to climate change – the focus should be on the creation of suitable habitats that are relatively easy to create and will increase network resilience;
 - there is a clear need to plan to review the UK SPA network at roughly decadal intervals (see also paragraph 32).

Feedback from SPA Review Executive Steering Group meeting 20 November

37. Throughout 2010 – 2011, the SWG consulted with the SPA Review Executive Steering Group (ESG) on progress, issues and outputs from Phase 1 of the SPA Review.
38. SWG expressed concerns about the policy-science interface within the SPA Review. In response, ESG advised that this had proved a problematic area for policy advisors in the past and reflected the complex and technical nature of some of the scientific issues involved and difficulty of describing these in terms that administrators could fully appreciate. They advised that when a policy steer was required on specific issues, a structured format should be used when making submissions to ESG.
39. ESG confirmed that they were generally content with progress, achievements and the general direction of the Phase 1 work undertaken or overseen by SWG. They specifically:
- approved the Phase 1 work plan;
 - endorsed the initial outlines of the Decision Framework (see paragraph 24) and final Phase 1 report (see paragraph 26);
 - approved general direction of the BTO work on cropped habitats (see paragraph 20);
 - noted that the technical biogeographic bird population data, site data and ECJ-species reports produced by BTO (see paragraphs 10-15, 17-19) had been assessed by the SWG as complete and of an appropriate standard;
 - concurred that the focus of the peer review exercise (see paragraph 27) should be to ensure that the scientific aspects of the Decision Framework were logical, valid, appropriate and unbiased.

Other issues

Status of 'qualifying' species on SPAs

40. At the January 2010 SWG meeting, the final details of the proposed statement on the status of 'qualifying' species on individual SPAs (see 2008-9 SWG Report) were agreed. The aim of this was to clarify the definitive list of qualifying interests on those existing classified SPAs where changes made in the 2001 SPA Review have yet to be reflected

through revision of relevant SPA citations. The statement was subsequently published on the JNCC SPA web pages¹³.

Calculating non-breeding waterbird assemblages on SPAs

41. At the September 2010 SWG meeting, the issue of the calculation of non-breeding waterbird assemblages for SPAs was discussed. On most old SPA citations and in the 2001 SPA Review site accounts, the waterfowl assemblage was described as being 'over-winter'. In practice, however, on many sites the largest numbers of some species occurs during passage periods. For more recent designations, Natural England had accordingly described the assemblage as 'during the non-breeding season' and calculated it using counts from the spring and autumn passage, as well as winter. The five year mean for a particular species could therefore be calculated potentially using yearly peaks from different seasons. The approach runs no risk of double counting between species or between years and there is no problem with calculating the mean for individual species and summing them to reach an assemblage total. The SWG agreed on the scientific merits of this 'during the non-breeding season' approach to calculating non-breeding waterbird assemblages on SPAs and agreed that this approach should be recommended as a standard throughout the UK.

RECOMMENDATION 2

The SWG recommends that the 'during the non-breeding season' approach to calculating non-breeding waterbird assemblages on SPAs is adopted as standard throughout the UK.

Listing of waterbird assemblages/components on SPAs

42. At the June 2011 SWG meeting, the issue of listing waterbird assemblage features on SPAs on Natura 2000 data forms was raised. This had been causing problems in England because of the way that species that form part of a waterbird assemblage have been presented. In Natural England's view, such species are not in themselves 'qualifying features' of an SPA and therefore should not be listed as such on Natura 2000 data forms. Although for presentation purposes it is helpful to have these listed as key components of an assemblage, they should not be listed side by side with species that qualify as features in their own right as this leads to confusion.
43. This issue was subject to much discussion during the 2001 SPA Review and raised issues as regards the European Commission's view of the coverage of SPAs in the UK. It was agreed that greater clarity was needed on the current approach to this matter, setting out the rationale, pros and cons, and implications. JNCC and Natural England were given an action to develop a paper on this matter for presentation at next SWG meeting. It was noted that this issue may need to be passed onto the N2KRSC for a policy decision as regards documenting species on SPAs.

¹³ e.g. <http://jncc.defra.gov.uk/page-1400>

Marine SPA provision

44. Throughout 2010 – 2011, JNCC continued to update the SWG on progress with the four strands of their work on identifying potential marine SPAs. The overall aim of this programme remains to report on the science underpinning site identification by the end of 2012, although pressures on staff resources may affect this. Continued technical work in support of site classification is currently envisaged to run to 2015-16.

Strand 1 – extensions to existing seabird colony SPAs

45. Based on a range of scientific studies, including at-sea surveys and radio-tracking, JNCC has provided advice on seaward extensions to existing seabird colony SPAs. These have been recommended for six species of seabird: Northern Fulmar and Northern Gannet (2km); Atlantic Puffin, Razorbill and Common Guillemot (1km); and Manx Shearwater (at least 4 km). This advice has been implemented in Scotland, where 31 existing seabird colony SPAs were extended in 2009. No seabird colony SPA extensions have yet been classified in other parts of the UK, though there are plans to do so. The timing of future colony extensions may be dependent on the results of ongoing work on Terns by JNCC.

Strand 2 – inshore aggregations of waterbirds outside the breeding season

46. The long-term programme of surveys aimed at identifying the waterfowl resource of inshore areas around the UK outside the breeding season was completed in winter 2010/11. Various analyses of these data have been undertaken and reports prepared on the distribution, numbers and, in some cases, possible SPA boundary options for consideration by the statutory nature conservation agencies. These include 22 areas off Scotland, three in England, and one each off Wales and Northern Ireland. Work was initiated to explore repeatable, 'objective' methods to identify the most suitable territories for classification from among these.

Strand 3 – offshore aggregations of seabirds

47. A technical report containing results of the analyses of offshore seabird distribution data from the European Seabirds at Sea (ESAS) database was published in 2010¹⁴. This identified concentrations of offshore seabirds that might merit consideration for protection within SPAs. Although several possible aggregations emerged after strict application of the UK SPA Selection Guidelines, these covered only a small number of species and geographic range. Therefore, an alternative approach was trialled that focused on the likely feeding areas associated with existing SPA colonies. Completion of this work is planned for 2012, after continuing consultation with stakeholders that should include holding a workshop in late 2011.

¹⁴ Kober, K., Webb, A., Win, I., Lewis, M., O'Brien, S., Wilson, L.J, Reid, J.B., (2010), An analysis of the numbers and distribution of seabirds within the British Fishery Limit aimed at identifying areas that qualify as possible marine SPAs, JNCC Report 431. Joint Nature Conservation Committee, Peterborough.
<http://jncc.defra.gov.uk/page-5622>

Strand 4 – other species not readily captured by the above

48. This strand of work is concerned with the identification of SPAs at a UK-level for several species of tern (Arctic, Common, Little, Roseate, Sandwich), Red-throated Diver during the breeding season, Balearic Shearwater in the post-breeding season, and breeding European Shag. Fieldwork undertaken during 2010-11 covered all Tern species at various locations around the UK and Balearic Shearwater off south-west England. This largely completed the fieldwork programme for Strand 4, but some targeted surveys of Little Terns are being considered for 2012. Data modelling work was progressed for all tern species with the aim of producing initial advice on possible SPAs in 2012. Modelling of breeding Red-throated Diver fieldwork data was reported to the Scottish Government and SNH with a view to assessing the suitability of identified areas as additional SPAs during 2012. The feasibility of using habitat suitability modelling to identify possible additional areas associated with the 13 European Shag UK colony SPAs was explored, informed by a pilot study on the distribution of the species in the Firth of Forth. However, this proved too costly to implement and alternative lower input solutions were under consideration. A decision on possible additional sites for European Shag is likely in 2011/12, although further analyses may be necessary.

Implementation

49. Following a lengthy consultation period, two new marine SPAs were successfully submitted to the European Commission in August 2010. These were The Outer Thames Estuary SPA (which regularly supports 38% of the GB population of wintering Red-throated Diver) and Liverpool Bay / Bae Lerpwl SPA (which regularly supports 5% of the GB population of wintering Red-throated diver, 3% of the NW European population of wintering Common scoter, and a waterfowl assemblage of c.56,000 individuals during the non-breeding season).

Future work programme

50. The future work programme for the SPAR SWG is provided in Appendix 2. The main components relate to activities that will complete Phase 1 of the ongoing SPA Review. The SWG will continue to provide technical support for this review and to act as the Technical Advisory Group focusing on directing and quality assuring the work. Key tasks include:
- commenting on and approving the work associated with the completion of the Site Provision Index;
 - finalising the Decision Framework to aid consistent review of SPA suites and use of this to assess the adequacy of UK SPA network provision for relevant species;
 - writing and approving the content of the final Phase 1 report pending submission to the Executive Steering Group.

APPENDIX 1 – Terms of Reference (revised 2004) for the UK Special Protection Area & Ramsar (Avian) Scientific Working Group (SWG)

Aims

The UK Special Protection Area & Ramsar (Avian) Scientific Working Group (SWG) is a consultative group established by Department for Environment, Food and Rural Affairs to assist Government administrations and the statutory conservation agencies in taking forward the further development of the SPA and Avian Ramsar Networks within the UK, in particular looking forward to the coherent management of these networks and monitoring of sites.

The Group will consider UK-scale scientific and technical issues regarding the SPA network in the terrestrial and marine environment. In particular, it will consider a range of issues raised in the context of the 2001 SPA Review, *inter alia*:

- issues in respect of those species where the 2001 SPA Review has indicated that there may be future cases for additional SPA provision, in particular, in the light of new national surveys, analyses, and conservation needs;
- consider those issues which the 2001 SPA Review indicated as outstanding;
- the development of understanding of broader European contexts as relevant to informing the evolution of the SPA network within the UK;
- the implications of revisions of estimates of the sizes of bird populations, both nationally and internationally;
- the development of understanding of data needs for SPA classification and management, and the further development of systems and processes to ensure the timely delivery of such information; and
- the application of processes to monitor the SPAs individually and collectively.

The Group will also consider and advise on scientific and technical issues regarding the avian aspects of the UK Ramsar network. In particular, it will consider the avian aspects of the Ramsar Reviews, providing advice to the UK Natura 2000 and Ramsar Steering Committee. In addition, it will, if requested by the Ramsar Review Steering Group, provide advice on avian Ramsar issues in the UK Crown Dependencies and Overseas Territories.

There is a significant range of potential issues to be addressed by the UK Special Protection Area & Ramsar (Avian) Scientific Working Group. The attached Annex seeks to outline the principal activities regarding SPAs and orders these into short, medium and long-term priorities. An initial task for the Group will be to develop a more detailed work programme, with key 'milestones', based on this Annex. The work programme will also include elements previously identified by the UK Ramsar Review Steering Group.

The activities of the Working Group in assisting government to meet the scientific and technical requirements of the Birds Directive will be complemented by discussions taking place within each of the countries. It will work closely with the UK Natura 2000 and Ramsar Steering Committee. A UK Natura 2000 and Ramsar Forum will provide an opportunity for stakeholders to consider broader issues regarding the development and management of the Natura 2000 and Ramsar networks.

Composition

The Group will be representative of the Government departments/devolved administrations and their statutory agencies across the UK, Joint Nature Conservation Committee (JNCC), and representation from the voluntary conservation sector as well as other stakeholder groups. The Group will thus comprise representatives of: Department of the Environment, Food and Rural Affairs; Scottish Executive; National Assembly of Wales; English Nature;

Scottish Natural Heritage; Countryside Council for Wales; Environment and Heritage Service; JNCC; and a representative selection of voluntary conservation agencies plus other stakeholder groups, such as those representing land-owning, land management, water industry, marine and business sectors, with the necessary scientific expertise.

On occasion, representatives from other organisations may be asked to attend where there is the need for information of a specific nature to be discussed by the Group.

Method of operation

It is anticipated that the Group will hold about three meetings per year, with actions between these periods being taken forward by electronic communications.

Chair and Secretariat

The Chair will be appointed by government prior to the first meeting. The Secretariat will be provided by JNCC who will convene and support the Group.

Sub-groups

It may, from time-to-time, be desirable to establish smaller sub-groups to resolve certain issues. These will be time-limited and will focus on concluding specific tasks on behalf of the Working Group as a whole.

Reporting

The Scientific Working Group will provide regular updates of its activity to the UK Natura 2000 and Ramsar Steering Committee.

Issues for attention

The Scientific Group will develop a work programme with priority given to the following issues:

- appraisal of any further sites/boundaries/species which may qualify on the basis of high quality data from the 1992/97 data window of the 2001 network review.
- development of a strategic approach to further work to resolve issues outstanding from the 2001 Review.
- appraisal of further sites based on substantial high quality datasets collected during 1997-2000, and later 2001-2004.
- development of a strategic approach to the collection and interpretation of new data, information on population sizes, and site monitoring.
- 'sweep-up' review of outstanding network needs commencing with data window concluding 2005/6 (i.e. review starting in autumn 2006) informed by outcomes of monitoring processes.

APPENDIX 2 – Main components of the SWG future work programme

SPA Review

To continue to provide technical support and peer review for Phase 1 of the SPA Review, including:

- commenting on and approving the work associated with the completion of the Site Provision Index;
- finalising the Decision Framework to aid consistent review of SPA suites;
- using the Decision Framework to assess the adequacy of SPA network provision at a UK-level for relevant species;
- writing and approving the content of the final Phase 1 report pending submission to the Executive Steering Group;
- commenting on the task to update documentation to take account of SPA classification since the 2001 Review;
- preparing progress reports for the Executive Steering Group and providing them with submissions on matters that require their approval.

Marine SPA provision

- receive and comment on updates on related work;
- SWG Chair to attend meetings of and brief the Defra Marine Biodiversity Policy Group of relevant matters.

SPA country-level implementation

- receive updates from the statutory nature conservation country agencies on SPA country-level implementation and related matters.

Other

- consider current approaches to the listing of SPA waterbird assemblages/components and the relative merits and implications;
- receive and comment on other related matters, including the FAME (Future Atlantic Marine Environment) project and Rufford Energy Recovery Facility planning application;
- provide recommendations to the N2KRSC through the SWG Chair and Annual Report.

APPENDIX 3 – UK SPAR SWG membership list October 2011

Attending SWG Members

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APPENDIX 4 – SPA Review Terms of Reference (July 2009)

Objective

- To undertake a targeted review of selected elements of the current UK network of terrestrial and coastal Special Protection Areas (SPAs) in order to ensure that UK obligations under Article 4 of the European Union's Directive on the conservation of wild birds (Council Directive 79/409/EEC, as amended) ('the Birds Directive') are met.

Scope of the Review

- The Review will examine the adequacy of SPA network in view of the requirements of the Birds Directive and make recommendations to the 4 Country Administrations.
- The geographical scope of the Review is limited to the terrestrial and coastal environments of the UK [and Gibraltar].
- The Review will consider relevant policy and legal implications of relevant judgments from the European Court of Justice.

NB: The offshore marine environment is excluded from the scope of the Review as marine SPAs are being considered by other work. However, the final report of the Review will cross link to progress on marine SPAs so as to present a complete overview of relevant activity to implement the UK SPA network.

Outcomes

The Review will be delivered in three phases.

- **The first phase** will consider and develop further guidance and principles to assist in the application of the UK SPA selection guidelines. This phase will build on work undertaken by the UK SPA and Ramsar Scientific Working Group (SWG), in particular with respect to the issues outlined in Appendix 1. Specific subjects to be considered in this phase are:
 - a) the adequacy of existing SPA network for species listed in Appendix 2 (attached), where appropriate using insights provided by the SWG's Site Provision Index (when finalised);
 - b) gaps in data availability for certain species/groups of species and recommendations on measures to address these in the medium and long-terms consequent upon any guidance and recommendations proposed;
 - c) the potential for, and implications of, inclusion of cropped habitats in SPAs following from work already undertaken by the SWG and reported to the Natura 2000 and Ramsar Steering Committee in 2007;
 - d) any additional measures necessary to ensure UK compliance with European case law relevant to the legal interpretation of the Birds Directive;
 - e) completion of an audit and updating of the documentation (related to both sites and species) summarising the extent of SPA suites for those species where modifications to species' suites have occurred since the publication of the 2001 Review.

Issues a) (on the Site Provision Index) and c) (related to the Cropped Habitats Information Project) will be progressed as first priority.

- Other tasks may be agreed by the Executive Steering Group if these can be undertaken without significant implications for time/budget.
- **The second phase** will be undertaken by the 4 Country Administrations [and Gibraltar] in conjunction with the relevant countryside agencies. It will involve the consideration and application of the principles and further SPA selection guidelines established in phase one, subject to Ministerial approval. Issues considered in the second phase will include:
 - g) whether new SPAs should be considered in the light of recommendations from the first phase of the review, and if so, their location and extent;
 - h) similarly, whether existing SPAs should be extended either in spatial extent or through the addition of further qualifying species; and
 - i) the establishment of a timetable to implement the findings of the review.
- **The third phase** will comprise:
 - j) revision of citations (as appropriate and necessary) by individual country agencies [and Gibraltar] at those sites where qualifying species have been changed; and
 - k) revision by JNCC of relevant documentation summarising the extent of SPA suites for those species where further additions to species' suites have occurred consequent upon decisions made in the second phase.

Timing

- The first phase of the review will start, resources permitting, in June 2009 and will aim to be completed by March 2011. A detailed project plan will be the responsibility of the Executive Steering Group and will be developed within the first month of the project.
- The timing of the second phase of the review will be determined by each country but the aim will be to conclude this phase as soon as possible. Aspects may occur in parallel with phase one.
- Phase three (formal revision of SPA citations as appropriate and necessary at individual sites) will also be determined by each country, but is anticipated, resources permitting, to be completed within a year from the conclusion of decisions taken in the second phase.

Linked studies

- The Review will also examine the avian aspects of the UK Ramsar network within the geographical scope of the review following a commitment given to the Ramsar Secretariat in 2005. This aspect of the review will be presented in a separate document to the UK 4 Countries and will, amongst other things, be used to inform Ramsar Information Sheet (RIS) updates required in 2012 under the Ramsar Convention (Resolution VI.13).
- The aim of this work will – as far as is possible given different criteria –harmonise the relevant qualifying interests of both international site series so as to facilitate common reporting and management.
- The outputs from the Review will aim to contribute to work being funded by Defra assessing the resilience of the SPA network in the light of climate change and consequent distribution shifts of birds which are qualifying interests on SPAs.

Appropriate liaison between the Defra project and the SPA Review will be established to this end.

Outputs

- Outputs of the review will include:
 - a) a report including an executive summary and supporting data; and
 - b) a series of annexes containing key scientific issues and findings in relation to particular species, or groups of species. It is probable that these will relate to the issues identified in Appendix 1.

Governance: Phase 1

a. Executive Steering Group:

The SPA Review will be overseen by an Executive Steering Group comprising representatives of the 4 Country Administrations and their statutory conservation agencies across the UK, together with the Joint Nature Conservation Committee and the Chair of the Technical Advisory Group.

Defra will provide the chair, and JNCC will provide the Secretariat function. The Executive Steering Group shall communicate as appropriate with the Natura 2000 and Ramsar Forum and Steering Committee.

Role:

- to commission and receive advice and recommendations from the Technical Advisory Group and take final decisions on issues arising in Phase 1;
- to meet as necessary to review progress, consider risks and to provide feedback to the JNCC Support Co. on emerging issues;
- in liaison with the Natura 2000 and Ramsar Steering Committee, to ensure that the UK SPA network is comprehensive and coherent, and to provide guidance on relevant policy and legal issues.

b. Technical Advisory Group:

The Technical Advisory Group will comprise members of the SWG and will utilise the same Chair and Secretariat. Current membership is at Appendix 3.

Role:

- to provide scientific advice and recommendations to the Executive Steering Group and JNCC.

c. Lead co-ordinator:

Joint Nature Conservation Committee Support Company.

Role:

- to undertake project management responsibilities and provide a secretariat function to the Executive Steering Group;
- co-ordinate contact between the Technical Advisory Group and the Executive Steering Group.

d. Joint Committee:

The outcomes of Phase 1 of the review will be provided as formal advice from the Joint Nature Conservation Committee to the 4 Countries Group [and Gibraltar].

Role:

- to take account of technical/scientific advice from the Technical Advisory Group and make *recommendations* to the 4 Countries Group [and Gibraltar] on the further guidelines and principles needed to assist in the application of existing SPA selection guidelines.

Peer review

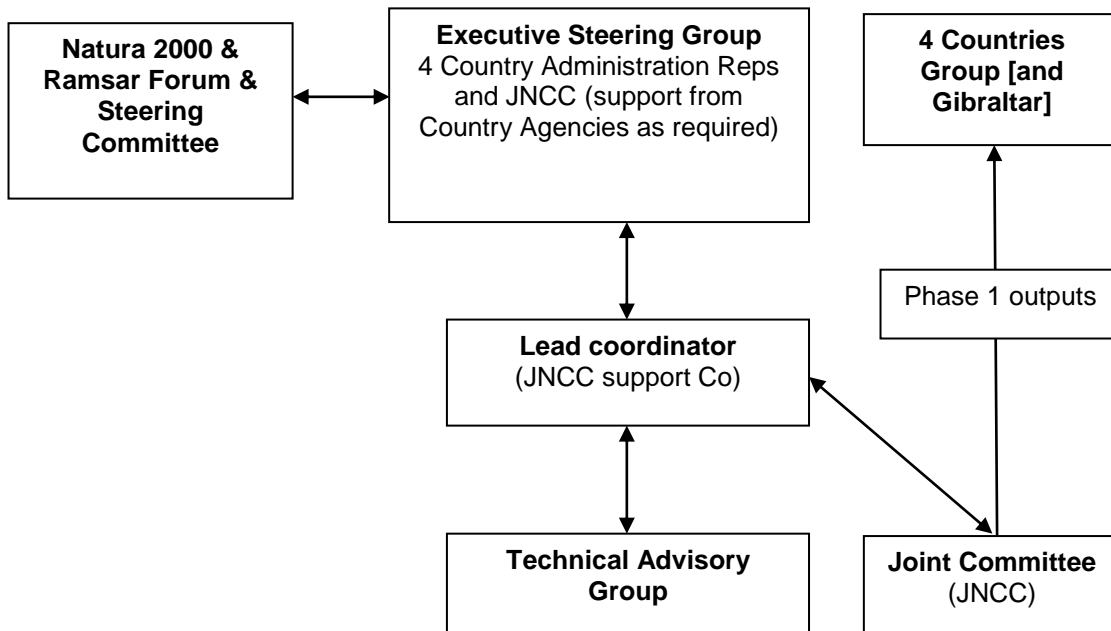
Relevant results of Phase 1 will be subject to scientific peer-review according to arrangements to be agreed by the Executive Steering Group.

Governance: Phase 2 (implementation)

- **4 Country Administrations [and Gibraltar]**

Implementation (either in terms of classification of new sites, or revision of existing site citations to reflect new qualifying species; together with any associated consultations with the owners and occupiers of sites) will be delivered by the 4 Country Administrations [and Gibraltar] in liaison with the relevant country conservation agencies (NE, SNH, CCW, NIEA)

Governance organisation chart (Phase 1)



Appendix 1 of the SPA Review Terms of Reference – main issues to be addressed in the SPA Review

Issue	Background and considerations
<p>1. Features the 2001 review stated would be revisited in view of the lack of data at the time of that review</p>	<p>“There are a very small number of species that, for reasons outlined below, it has not yet been possible to identify full SPA suites. These will require further review. There are three main reasons for this:</p> <ul style="list-style-type: none"> • it is too early to assess ‘most suitable’ sites for species that are actively expanding in range and population size in the UK; • lack of suitable data and information with which to assess important sites; • the protection requirements of birds in the offshore marine environment are outside the scope of this review.” <p style="text-align: right;">2001 Review</p>
<p>1a. Recent UK colonists</p>	<p>“A number of species have colonised the UK in recent years, predominantly from mainland Europe. For example, Little Egret was a regular but rare vagrant in the UK until large influxes began in 1989. Since then, numbers have continued to increase and the species is found at wide-ranging sites along the coast of southern and south-eastern England (see species account A6.14). In 1996, it bred in the UK for the first time. The SPA suite for this species reflects the current size and distribution of the population in each season. Given the continuing expansion of the population size and range, however, a review of its SPA suite is likely to be required at a future date. The Rare Breeding Birds Panel and the Wetland Bird Survey will provide the necessary data for such a review.”</p> <p style="text-align: right;">2001 Review</p>
<p>1b. Re-establishing raptors</p>	<p>“Both White-tailed Eagle and Red Kite are currently undergoing significant expansions in their UK populations and distribution arising from re-establishment schemes which commenced in the late 1980s (Evans <i>et al.</i> 1994). Within the UK, the Red Kite’s current SPA provision maintains the native core population in Wales. A suite of SPAs for Red Kites may be appropriate in England and Scotland in the future, when populations in these countries have increased to such an extent that the ‘most suitable’ sites can be determined. Data from the Rare Birds Breeding Panel and the proposed decennial national survey of Red Kites (commencing in 2000) will provide the necessary data for such a review.”</p> <p style="text-align: right;">2001 Review</p>
<p>1c. Wintering gulls</p>	<p>“The review discovered that for gull species, data were not available to undertake a comprehensive assessment of their distribution and need for SPA protection during the winter period. Data from the most recent (decennial) national gull roost survey undertaken by the BTO in 1993 are unpublished. The Wetland Bird Survey (WeBS) began collecting data on wintering gulls in 1993 (Cranswick <i>et al.</i> 1995) and when suitable data are available allowing regularity at key sites to be assessed, it is intended to review SPA suites for these species. In the light of this data inadequacy, JNCC will be working to further develop WeBS monitoring to better assess wintering gull numbers, and identify important sites in a national context.”</p> <p style="text-align: right;">2001 Review</p>
<p>1d. Wintering raptors in coastal areas</p>	<p>“Information on the distribution and numbers of Hen Harriers and Merlins in winter, especially in coastal areas, is currently limited. Where information is available, this has been used to identify suites of SPAs for these species. JNCC and the country agencies will work to develop better monitoring of wintering raptors in the UK, at both site and national scales. It is possible that further sites of European importance for Hen Harrier and Merlin will be identified through this work.”</p> <p style="text-align: right;">2001 Review</p>

Issue	Background and considerations
1e. Passage waders and terns	<p>“The estuaries and rocky-shore coasts of the UK are important to waders not just during the winter period, but also during the autumn and spring migration periods. For some species, for example Sanderling and Ringed Plover, peak numbers recorded nationally occur in April-May or in August-October. Whilst WeBS collects data at some sites during these passage periods, they are not normally published annually and have only been systematically collected at most coastal sites since 1993 (Cranswick <i>et al.</i> 1995). The issues involved with interpretation of data during periods of high turnover (Frederiksen <i>et al.</i> 2001) and in situations where mixed populations (such as three populations of Dunlins) may be present, are also far from clear. Indeed, such situations may present intractable fieldwork problems. Where data relating to passage periods have been readily available, however, they have been used in this review.</p> <p>The comprehensive database being developed by WeBS will allow much better interpretation of existing UK passage data for waterbirds (including Ringed Plover, Redshank, Curlew and Sanderling). It seems unlikely that new sites will be identified, but some species may be added as qualifying species to existing SPAs, where there is a large passage occurrence but limited overwintering.</p> <p>Similar issues apply to terns on migration. Those breeding in northern parts of the UK use more southerly estuaries en route to wintering areas off the coasts of Africa. Knowledge of these autumn (and spring) movements is poor and the list of sites identified in this review is known to be incomplete. JNCC will review existing knowledge on important sites in the UK for waders and terns. The WeBS partnership is also actively taking steps to ensure that those sites of importance in any season of the year, and which are subject to monitoring, are clearly identified in annual published reports.”</p> <p style="text-align: right;">2001 Review</p>
1f. Marine species	<p>“Whilst this review has considered terrestrial sites that extend into marine or intertidal areas for example, estuaries or inshore areas – it has not considered the requirements of birds using the wholly offshore environment. The site suites presented here may be incomplete and possible additional provision still needs to be determined in the marine environment. The protection requirements of birds in the offshore marine environment (with respect to Article 4 of the Birds Directive) will be considered in a separate review being co-ordinated by JNCC.”</p> <p style="text-align: right;">2001 Review</p>
2. Scarce species for which periodic national surveys have been undertaken since the 2001 review	<p>Many scarce species are not adequately monitored by annual monitoring schemes for commoner birds, yet are sufficiently widespread for rare bird recording to give an incomplete annual assessment of numbers and distribution. Such species, which include many of the scarcer raptors (for example Golden Eagle, Hen Harrier and Peregrine, are typically monitored by means of national surveys (often involving professional surveyors) undertaken roughly once every decade. For such species, these decadal surveys give the only basis for assessing the relative importance of particular sites, since they provide the only comprehensive ‘snap-shot’ of all sites.</p> <p>A process of review of the SPA network for relevant species when new national survey data become available has previously been discussed and agreed. It is proposed that the 2010 review assesses those new datasets that have become available for relevant scarce species since the mid 1990s data window adopted in the 2001 review.</p>

Issue	Background and considerations
<p>3. Inclusion of cropped habitats within SPAs</p>	<p>A significant proportion of the issues raised by RSPB regarding the sufficiency of the SPA network following the 2001 review relate to cropped habitats, and in order to tackle these issues more strategically, JNCC initiated a Cropped Habitats Information Project (CHIP) in 2002 which has been developed since then with input from the SWG.</p> <p>It has assessed scientific knowledge of the ecological dependency on cropped habitats of the following species: Bewick’s Swan, Whooper Swan, Bean Goose, Pink-footed Goose, European White-fronted Goose, Greenland White-fronted Goose, Greylag Goose (Iceland population), Barnacle Goose, Dark-bellied Brent Goose, Light-bellied Brent Goose (East Canadian High Arctic population), Light-bellied Brent Goose (East Atlantic population), Wigeon, Teal, Mallard, Pintail, Honey-buzzard, Red Kite, Marsh Harrier, Hen Harrier, Montagu’s Harrier, Osprey, Merlin, Capercaillie, Corncrake, Oystercatcher, Stone-curlew, Ringed Plover, Golden Plover, Dunlin, Common Snipe, Whimbrel, Curlew, Redshank, Black-headed Gull, Common Gull, Short-eared Owl, Twite, Nightjar, Woodlark, Ring Ouzel, Chough and Scottish Crossbill.</p> <p>CHIP has aimed to summarise current knowledge of the ecological importance of cropped habitats for a number of relevant Annex I and migratory species, and explore the implications of different forms of management regime for the maintenance of these habitats.</p> <p>CHIP has emphasised that the issue has a high species-specific element. It has shown demonstrated that the policy decision as to whether or not to include cropped habitats within protected areas is not an issue that can be considered as a generality but needs to be determined separately for different species.</p> <p>Recognising that the inclusion of cropped habitats within protected areas is a policy issue, SWG has reported outputs from CHIP to the N2KRSC in 2007. N2KRSC requested further information prior to making decisions on CHIP recommendations.</p> <p>The CHIP element of Phase I of the review will further elaborate guidance on this topic, in particular aiming to summarise issues that will need to be taken into consideration with respect to decisions in Phase II as to whether to include cropped habitats for concerned species within the SPA network. These issues are likely to include factors such as:</p> <ul style="list-style-type: none"> • knowledge of the ecological dependency of the species on cropped habitats; • understanding of within and between year patterns of use of cropped habitats; • knowledge of between-year faithfulness to particular locations in the context of changing cropping patterns within the landscape; • conservation status of the species concerned; and • relevant ECJ case-law. <p>It is possible that one output may be in the form of a ‘decision-tree’ that will aid species assessment and decision-taking, possibly at various relevant scales (national/site) to determine best conservation opportunities for the species based on a site and/or alternative tools approach.</p>

Issue	Background and considerations
<p>4. Inclusion of all Annex I species (Irish ECJ judgement)</p>	<p>The ECJ¹⁵ found that “it is clear from Article 4(1) of the Birds Directive, as interpreted by the Court, that if species listed in Annex I occur on the territory of a Member State, it is obliged to define SPAs for them. It follows that Ireland ought to have identified the most suitable territories for conservation of the kingfisher and classified them as SPAs.</p> <p>It follows that Ireland, which acknowledges that the kingfisher is present in its territory, had failed to comply with that obligation at the end of the period laid down in the additional reasoned opinion notified on 11 July 2003. The action is therefore also well-founded as regards the suitable sites for conservation of the kingfisher.”</p> <p>Those Annex I species occurring in the UK with established populations (or regularly occurring) and for which there is no SPA provision are Common Crane, Smew, White-tailed Eagle, Montagu’s Harrier, Kingfisher, and several marine species currently under review in the marine SPA programme.</p>
<p>5. Process issues: updating assessments of species SPA suites consequent on recent classifications</p>	<p>The data and information presented for species on JNCC’s website report the results of the 2001 review (http://www.jncc.gov.uk/page-1418). These accounts have not been updated since then even though several important SPAs have since been classified to address identified shortfalls in coverage (see http://www.jncc.gov.uk/page-3517 for additions since 2005).</p>

¹⁵ <http://curia.europa.eu/jurisp/cgi-bin/form.pl?lang=en&Submit=Rechercher&alldocs=alldocs&docj=docj&docop=docop&docor=docor&docjo=docjo&numaff=C-418/04&datefs=&datefe=&nomusuel=&domaine=&mots=&resmax=100>

Appendix 2 of the SPA Review Terms of Reference – summary of those species where it is proposed to review of SPA suites for the species concerned [note that the following information has been updated to remove Pochard, which was originally included in error]

B = breeding season; NB = non-breeding season; P = migration/passage periods. Numbers in parentheses indicate issue number in Appendix 1a. Species in italics indicate those where no substantive review of SPA suite is planned, just updating to species account to reflect post-2001 site classifications.

Species/season	Re-assess species' suite in light of new national surveys and/or as anticipated in 2001 Review (1a, 1b, 1c, 1d, 1e & 2)	Species included in CHIP (3)	Update species account in light of post 2001 classifications ¹⁶	Annex I species with no SPAs (assessment needed in light of ECJ ruling) (4)	Species subject to marine SPA review (1f)
<i>Red-throated Diver (B)</i>			✓ (5)		✓ (1f)
Red-throated Diver (NB)					✓ (1f)
Great Northern Diver (NB)					✓ (1f)
<i>Black-throated Diver (B)</i>			✓ (5)		
<i>Great Crested Grebe (NB)</i>			✓ (5)		
Slavonian Grebe (NB)					✓ (1f)
Balearic Shearwater (NB)					✓ (1f)
Storm Petrel (B)	✓ (2)		✓ (5)		
<i>Cormorant (NB)</i>			✓ (5)		
Bittern (B & NB)	✓ (2)		✓ (5)		
Little Egret (B & NB)	✓ (1a)				
Bewick's Swan (NB)		✓ (3)			
Whooper Swan (NB)		✓ (3)			
Bean Goose (NB)		✓ (3)	✓ (5)		

¹⁶ Species accounts will be updated for any species to which a change of SPA suite is agreed in order to ensure that publicly available information on the scope and content of the UK SPA network is accurate and up-to-date.

Species/season	Re-assess species' suite in light of new national surveys and/or as anticipated in 2001 Review (1a, 1b, 1c, 1d, 1e & 2)	Species included in CHIP (3)	Update species account in light of post 2001 classifications(5 ¹⁶)	Annex I species with no SPAs (assessment needed in light of ECJ ruling) (4)	Species subject to marine SPA review (1f)
Pink-footed Goose (NB)		✓ (3)			
European White-fronted Goose (NB)		✓ (3)			
Greenland White-fronted Goose (NB)	✓ (2)	✓ (3)			
Icelandic Greylag Goose (NB)		✓ (3)			
Greenland Barnacle Goose (NB)		✓ (3)			
Dark-bellied Brent Goose		✓ (3)	✓ (5)		
East Atlantic Light-bellied Brent Goose (NB)		✓ (3)			
Canadian Light-bellied Brent Goose (NB)			✓ (5)		
<i>Shelduck (NB)</i>			✓ (5)		
Wigeon (NB)		✓ (3)	✓ (5)		
<i>Gadwall (NB)</i>			✓ (5)		
Teal (NB)		✓ (3)	✓ (5)		
Mallard (NB)		✓ (3)	✓ (5)		
Pintail (NB)		✓ (3)	✓ (5)		
Scaup (NB)			✓ (5)		✓ (1f)
Eider (NB)					✓ (1f)
Long-tailed Duck (NB)					✓ (1f)
Common Scoter (B)	✓ (2)				
Common Scoter (NB)					✓ (1f)
Common Goldeneye (NB)			✓ (5)		✓ (1f)
Smew (NB)				✓ (4)	
Honey Buzzard (B)	✓ (2)	✓ (3)			
Red Kite (B)	✓ (1b, 2)	✓ (3)			

Species/season	Re-assess species' suite in light of new national surveys and/or as anticipated in 2001 Review (1a, 1b, 1c, 1d, 1e & 2)	Species included in CHIP (3)	Update species account in light of post 2001 classifications(5 ¹⁶)	Annex I species with no SPAs (assessment needed in light of ECJ ruling) (4)	Species subject to marine SPA review (1f)
White-tailed Eagle (B)	✓ (1b)			✓ (4)	
Marsh Harrier (B)		✓ (3)	✓ (5)		
Hen Harrier (B)	✓ (2)		✓ (5)		
Hen Harrier (NB)	✓ (1d)	✓ (3)	✓ (5)		
Montagu's Harrier (B)		✓ (3)		✓ (4)	
Golden Eagle (B)	✓ (2)		✓ (5)		
Osprey (B)	✓ (2)	✓ (3)	✓ (5)		
Merlin (B)	✓ (2)	✓ (3)	✓ (5)		
Merlin (NB)	✓ (1d)				
Peregrine (B)	✓ (2)		✓ (5)		
Capercaillie (B)	✓ (2)	✓ (3)	✓ (5)		
Spotted Crane (B)	✓ (2)				
Corncrake (B)	✓ (2)	✓ (3)	✓ (5)		
Common Crane (B & NB)	✓ (1a)			✓ (4)	
Oystercatcher (NB)		✓ (3)	✓ (5)		
Avocet (B & NB)			✓ (5)		
<i>Stone curlew (B)</i>		✓ (3)	✓ (5)		
Ringed Plover (B)		✓ (3)			
Ringed Plover (NB)	✓ (1e)	✓ (3)	✓ (5)		
<i>Dotterel (B)</i>			✓ (5)		
Golden Plover (B)		✓ (3)			
<i>Golden Plover (NB)</i>			✓ (5)		
<i>Grey Plover (NB)</i>			✓ (5)		

Species/season	Re-assess species' suite in light of new national surveys and/or as anticipated in 2001 Review (1a, 1b, 1c, 1d, 1e & 2)	Species included in CHIP (3)	Update species account in light of post 2001 classifications(5 ¹⁶)	Annex I species with no SPAs (assessment needed in light of ECJ ruling) (4)	Species subject to marine SPA review (1f)
<i>Lapwing (NB)</i>			✓ (5)		
<i>Knot (NB)</i>			✓ (5)		
Sanderling (NB)	✓ (1e, 2)				
Purple Sandpiper (NB)	✓ (1e, 2)				
Dunlin (B)		✓ (3)			
<i>Dunlin (NB)</i>			✓ (5)		
Ruff (NB)	✓ (2)				
<i>Black-tailed Godwit (NB)</i>			✓ (5)		
<i>Bar-tailed Godwit (NB)</i>			✓ (5)		
Whimbrel (B)		✓ (3)			
Whimbrel (NB)			✓ (5)		
Curlew (B)		✓ (3)			
Curlew (NB)	✓ (1e)	✓ (3)	✓ (5)		
Redshank (B)		✓ (3)			
Redshank (NB)	✓ (1e)				
Common Snipe (B)		✓ (3)			
Turnstone (NB)	✓ (1e, 2)				
Arctic Skua (B)					✓ (1f)
Mediterranean Gull (B)	✓ (2)				
Black-headed Gull (NB)	✓ (1c, 2)	✓ (3)			
Little Gull (NB)					✓ (1f)
Common Gull (NB)	✓ (1c, 2)	✓ (3)			
Lesser Black-backed Gull (NB)	✓ (1c, 2)				

Species/season	Re-assess species' suite in light of new national surveys and/or as anticipated in 2001 Review (1a, 1b, 1c, 1d, 1e & 2)	Species included in CHIP (3)	Update species account in light of post 2001 classifications(5 ¹⁶)	Annex I species with no SPAs (assessment needed in light of ECJ ruling) (4)	Species subject to marine SPA review (1f)
Herring Gull (NB)	✓ (1c, 2)				
Great Black-backed Gull (NB)	✓ (1c, 2)				
Little Tern (B)					✓ (1f)
Sandwich Tern (B)					✓ (1f)
Common Tern (B)			✓ (5)		✓ (1f)
Arctic Tern (B)					✓ (1f)
Roseate Tern (B)					✓ (1f)
Short-eared Owl (B & NB)		✓ (3)	✓ (5)		
Nightjar (B)	✓ (2)	✓ (3)			
Common Kingfisher (B & NB)				✓ (4)	
Woodlark (B)	✓ (2)	✓ (3)	✓ (2)		
Ring Ouzel (B)	✓ (2)	✓ (3)			
Dartford Warbler (B)	✓ (2)		✓ (2)		
Chough (B & NB)	✓ (2)	✓ (3)	✓ (5)		
Twite (B)	✓ (2)	✓ (3)			
Scottish Crossbill (B)	✓ (2)	✓ (3)	✓ (2)		

Appendix 2 of the SPA Review Terms of Reference continued – consolidated lists of species by proposed approaches

Species included in current marine SPA review

Red-throated Diver (B & NB)	Y (marine)
Great Northern Diver (NB)	Y (marine)
Slavonian Grebe (NB)	Y (marine)
Balearic Shearwater (NB)	Y (marine)
Scaup (NB)	Y (marine)
Eider (NB)	Y (marine)
Long-tailed Duck (NB)	Y (marine)
Common Scoter (NB)	Y (marine)
Common Goldeneye (NB)	Y (marine)
Arctic Skua (B)	Y (marine)
Little Gull (NB)	Y (marine)
Little Tern (B)	Y (marine)
Sandwich Tern (B)	Y (marine)
Common Tern (B)	Y (marine)
Arctic Tern (B)	Y (marine)
Roseate Tern (B)	Y (marine)

Species the review of whose SPA suite depends on policy decisions related to CHIP

Bewick's Swan (NB)	Y (CHIP)
Whooper Swan (NB)	Y (CHIP)
Bean Goose (NB)	Y (CHIP)
Pink-footed Goose (NB)	Y (CHIP)
European White-fronted Goose (NB)	Y (CHIP)
Greenland White-fronted Goose (NB)	Y (CHIP)
Icelandic Greylag Goose (NB)	Y (CHIP)
Greenland Barnacle Goose (NB)	Y (CHIP)
Dark-bellied Brent Goose	Y (CHIP)
East Atlantic Light-bellied Brent Goose (NB)	Y (CHIP)
Canadian Light-bellied Brent Goose (NB)	Y (CHIP)
Wigeon (NB)	Y (CHIP)
Pintail (NB)	Y (CHIP)
Mallard (NB)	Y (CHIP)
Teal (NB)	Y (CHIP)
Honey-buzzard (B)	Y (CHIP)
Red Kite (B)	Y (CHIP)
Marsh Harrier (B)	Y (CHIP)
Hen Harrier (NB)	Y (CHIP)
Montagu's Harrier (B)	Y (CHIP)
Osprey (B)	Y (CHIP)
Merlin (B)	Y (CHIP)
Capercaillie (B)	Y (CHIP)
Corncrake (B)	Y (CHIP)
Oystercatcher (NB)	Y (CHIP)
Stone-curlew (B)	Y (CHIP)
Ringed Plover (B & NB)	Y (CHIP)
Golden Plover (B)	Y (CHIP)
Dunlin (B)	Y (CHIP)

Curlew (B)	Y (CHIP)
Curlew (NB)	Y (CHIP)
Whimbrel (B)	Y (CHIP)
Redshank (B)	Y (CHIP)
Common Snipe (B)	Y (CHIP)
Black-headed Gull (NB)	Y (CHIP)
Common Gull (NB)	Y (CHIP)
Short-eared Owl (B & NB)	Y (CHIP)
Twite (B)	Y (CHIP)
Nightjar (B)	Y (CHIP)
Woodlark (B)	Y (CHIP)
Ring Ouzel (B)	Y (CHIP)
Chough (B & NB)	Y (CHIP)
Twite (B)	Y (CHIP)
Scottish Crossbill (B)	Y (CHIP)

Species proposed for review of terrestrial SPA suite

Storm Petrel (B)	Y
Bittern (B)	Y
Bittern (NB)	Y
Little Egret (B & NB)	Y
Greenland White-fronted Goose (NB)	Y
Common Scoter (B)	Y
Honey Buzzard (B)	Y
Red Kite (B)	Y
White-tailed Eagle (B)	Y
Hen Harrier (B & NB)	Y
Golden Eagle (B)	Y
Osprey (B)	Y
Merlin (B)	Y
Merlin (NB)	Y
Peregrine (B)	Y
Capercaillie (B)	Y
Spotted Crane (B)	Y
Corncrake (B)	Y
Common Crane (B & NB)	Y
Ringed Plover (NB)	Y
Sanderling (NB)	Y
Purple Sandpiper (NB)	Y
Ruff (NB)	Y
Curlew (NB)	Y
Redshank (NB)	Y
Turnstone (NB)	Y
Mediterranean Gull (B)	Y
Black-headed Gull (NB)	Y
Common Gull (NB)	Y
Lesser Black-backed Gull (NB)	Y
Herring Gull (NB)	Y
Great Black-backed Gull (NB)	Y
Nightjar (B)	Y
Woodlark (B)	Y

Ring Ouzel (B)	Y
Dartford Warbler (B)	Y
Chough (B & NB)	Y
Twite (B)	Y
Scottish Crossbill (B)	Y

Species for which species accounts need to be updated in the light of post-2001 SPA classifications¹⁷

<i>Red-throated Diver (B)</i>	<i>update of species account only</i>
<i>Black-throated Diver (B)</i>	<i>update of species account only</i>
<i>Great Crested Grebe (NB)</i>	<i>update of species account only</i>
<i>Storm Petrel (B)</i>	<i>update of species account only</i>
<i>Cormorant (NB)</i>	<i>update of species account only</i>
Bittern (B &NB)	update of species accounts
Bean Goose (NB)	update of species account
Dark-bellied Brent Goose (NB)	update of species account
<i>Shelduck (NB)</i>	<i>update of species account</i>
Wigeon (NB)	update of species account
<i>Gadwall (NB)</i>	<i>update of species account only</i>
Teal (NB)	update of species account
Mallard (NB)	update of species account
Pintail (NB)	update of species account
Scaup (NB)	update of species account
Goldeneye (NB)	update of species account
Marsh Harrier (B)	update of species account
Hen Harrier (B & NB)	update of species accounts
Golden Eagle (B)	update of species account
<i>Osprey (B)</i>	<i>update of species account only</i>
Merlin (B)	update of species account
Peregrine (B)	update of species account
Capercaillie (B)	update of species account
Corncrake (B)	update of species account
Oystercatcher (NB)	update of species account
<i>Avocet (B & NB)</i>	<i>update of species accounts only</i>
Stone-curlew (B)	update of species account
<i>Ringed Plover (NB)</i>	<i>update of species account only</i>
<i>Dotterel (B)</i>	<i>update of species account only</i>
<i>Golden Plover (NB)</i>	<i>update of species account only</i>
<i>Grey Plover (NB)</i>	<i>update of species account only</i>
<i>Lapwing (NB)</i>	<i>update of species account only</i>
<i>Knot (NB)</i>	<i>update of species account only</i>
<i>Dunlin (NB)</i>	<i>update of species account only</i>
<i>Black-tailed Godwit (NB)</i>	<i>update of species account only</i>
<i>Bar-tailed Godwit (NB)</i>	<i>update of species account only</i>
<i>Whimbrel (NB)</i>	<i>update of species account only</i>

¹⁷ Note that JNCC have currently only checked citations of sites classified between 2005 and present for qualifying species. Need to check 2001-2005 citations also which may add additional species.

<i>Curllew (NB)</i>	<i>update of species account only</i>
Common Tern (B)	update of species account
Short-eared Owl (B & NB)	update of species account
Woodlark (B)	update of species account
Dartford Warbler (B)	update of species account
Chough (B & NB)	update of species account
Scottish Crossbill (B & NB)	update of species account

Annex I species with no SPAs and need to review arising from the recent ECJ Irish judgement

Smew (NB)	ECJ Annex I case
White-tailed Eagle (B)	ECJ Annex I case
Montagu's Harrier (B)	ECJ Annex I case
Common Crane (B & NB)	ECJ Annex I case
Common Kingfisher (B & NB)	ECJ Annex I case