The status of UK SPAs in the 2000s: the Third Network Review

This document forms part of the above publication.
To view the full publication visit: http://jncc.defra.gov.uk/page-7309
Purple Sandpiper *Calidris maritima*

1. **Legal status and legislative or conservation status changes since 2001**

   **Birds Directive Article 4 status**
   Migratory

   **IUCN Red List status and change:**
   Least Concern

   **Birds of Conservation Concern status and change:**
   BOCC 2 (2002) – Amber
   BOCC 3 (2009) – Amber
   BOCC 4 (2015) – Amber

2a. **Population size**

<table>
<thead>
<tr>
<th>Area</th>
<th>Population sizes (individuals)</th>
<th>Source</th>
<th>Selection thresholds</th>
<th>Totals in species’ SPA suite</th>
<th>Proportion in SPA suite</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB</td>
<td>13,000</td>
<td>Musgrove <em>et al.</em> 2011</td>
<td>130</td>
<td>745</td>
<td>5.7%</td>
</tr>
<tr>
<td>All-Ireland</td>
<td>3,330</td>
<td>Crowe <em>et al.</em> 2008</td>
<td>35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   **Biogeographic – maritima, NE Canada & N Greenland**
   25,000
   Delany *et al.* 2009; Wetlands International 2012
   250
   745
   3.0%

2b. **Population trend**

<table>
<thead>
<tr>
<th>Period of trend</th>
<th>UK trend</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term UK trend</td>
<td>1980/81 to 2010/11</td>
<td>-18.0%</td>
</tr>
<tr>
<td>Short-term UK trend</td>
<td>1999/2000 to 2010/11</td>
<td>-29.1%</td>
</tr>
</tbody>
</table>

2c. **Site Provision Index**

   The background and methodology for the Site Provision Index is presented elsewhere in this report. Results for this species indicate anticipated medium population provision within the UK SPA network.

3. **Changes to the SPA suite since the 2001 Review**


4. **Relevant site-related recommendations within international and national (BAP) action plans**

   No international or national action or management plan has been developed for this species.

5. **Projected impact of climate change on the SPA suite**

   In the period of this Review there have been two analyses to model the effects of climate change on UK’s birds. The *Climatic atlas of European breeding birds* (Huntley *et al.* 2004) modelled current distributions against current climate and then projected these to reflect models of future climatic
change. This predicted the distribution of European breeding birds at and beyond the end of the 21st century. However, the technique makes no allowance for how bird habitats will change and move. For example, some species may be unable to extend their geographical range into areas made potentially suitable by climate change because of lack of suitable habitat. Caveats as to the limitations of the method are presented in the Climatic Atlas and should be read alongside any summary interpretation presented below.

Non-breeding Purple Sandpiper was not included in the Climatic Atlas of European breeding birds.

The Climate Change Impacts on Avian Interests of Protected Area Networks (CHAINSPAN) project (Pearce-Higgins et al. 2011) used more sophisticated modelling techniques, specifically in relation to some of the qualifying species using the UK SPA network. In particular, they modelled future abundance as well as presence/absence. Their report gives a number of interpretive caveats.

Climate modelling can provide important information as to anticipated future changes in distribution and abundance, but this information should be interpreted with caution. Pearce-Higgins et al. stress the important role of habitat management within SPAs as an important adaptation measure. This will help improve site-quality as well as reduce the severity of other pressures on populations.

For non-breeding Purple Sandpiper, modelled impacts are as follows: by 2050, under a medium emissions scenario, spring passage numbers within the SPA suite are anticipated, with poor confidence, to increase by between 25-50%.

6. Assessment of SPA suite by this Review

Cropped habitat assessment
Not relevant therefore not assessed by the SPAR SWG Cropped Habitats Information Project (Baker & Stroud 2007).

Overall assessment of sufficiency of SPA suite:
- Population numbers: Insufficient
- Range coverage: Insufficient – especially in southern and western UK
- Ecological sufficiency: Sufficient

Additional conservation measures recommended?
Consideration of the need for and provision of, additional conservation measures (outwith this SPA Review) is required.

7. Scientific advice regarding SPA suite

In the context of current knowledge, contemporary SPA provision is insufficient for the requirements of the species, and appropriate changes or additions to the SPA suite should be considered to ensure that it continues to provide adequate coverage of population numbers and distribution.

8. Recommendations regarding survey and monitoring

Continue to ensure national population monitoring and coverage of key and other sites through WeBS.

Promote the counting of all sites within SPA suite during January each year so as to enhance quality of assessment of numbers within the SPA suite using numbers from that month.

Enhance coverage of North Uist Machair and Islands, and Northumberland Coast SPAs in future WeBS counts in the light of the paucity of data from 2000s.

Seek to enhance regular population monitoring on non-estuarine coasts, not just through the Non-Estuarine Waterbird Survey but on a more regular basis.
9. Distribution map for Purple Sandpiper SPA suite

Closed symbols indicate where the species occurs as a classified ‘feature’ of a site, whilst open symbols show those sites within the species’ SPA suite where formal classification has yet to occur (although the site may be classified for other species).

10. References


## 11. SPA suite

<table>
<thead>
<tr>
<th>SPA Guidelines selection stage</th>
<th>Date of classification</th>
<th>UK SPA suite in 1990s (individuals)</th>
<th>Assessment of UK SPA suite in 2000s (individuals)</th>
<th>Data period</th>
<th>Data source</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Sanday Coast</td>
<td>1.2 11 August 1997</td>
<td>840</td>
<td>125</td>
<td>2005/6-2009/10</td>
<td>WeBS</td>
<td></td>
</tr>
<tr>
<td>North Uist Machair and Islands</td>
<td>1.4 Not yet classified</td>
<td>370</td>
<td>439</td>
<td></td>
<td></td>
<td>Peak count from 2004/5 used in absence of WeBS counts</td>
</tr>
<tr>
<td>Northumbria Coast</td>
<td>1.2 2 February 2000</td>
<td>763</td>
<td>230</td>
<td>2005/6-2009/10</td>
<td>WeBS</td>
<td></td>
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</tbody>
</table>

Total for SPAs in GB

<table>
<thead>
<tr>
<th>GB population</th>
<th>UK SPA suite in 1990s (individuals)</th>
<th>Assessment of UK SPA suite in 2000s (individuals)</th>
<th>Data period</th>
<th>Data source</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,973</td>
<td>745</td>
<td>in January</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21,300</td>
<td>13,000</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>thus GB SPAs hold</td>
<td>9.3% GB</td>
<td>5.7% GB</td>
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</table>

Total for SPAs in UK

<table>
<thead>
<tr>
<th>Biogeographic population</th>
<th>UK SPA suite in 1990s (individuals)</th>
<th>Assessment of UK SPA suite in 2000s (individuals)</th>
<th>Data period</th>
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<td>745</td>
<td>in January</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50,500</td>
<td>25,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>thus SPAs hold</td>
<td>3.9% international</td>
<td>3.0% international</td>
<td></td>
<td></td>
<td></td>
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</table>