European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC)

Fourth Report by the United Kingdom under Article 17

on the implementation of the Directive
from January 2013 to December 2018

Supporting documentation for the
conservation status assessment for the species:

S1044 - Southern damselfly (*Coenagrion mercuriale*)

ENGLAND

IMPORTANT NOTE - PLEASE READ

- The information in this document is a country-level contribution to the UK Report on the conservation status of this species, submitted to the European Commission as part of the 2019 UK Reporting under Article 17 of the EU Habitats Directive.
- The 2019 Article 17 UK Approach document provides details on how this supporting information was used to produce the UK Report.
- The UK Report on the conservation status of this species is provided in a separate document.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Explanatory notes (where provided) by the country are included at the end. These provide an audit trail of relevant supporting information.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; (iii) the field was not relevant to this species (section 12 Natura 2000 coverage for Annex II species) and/or (iv) the field was only relevant at UK-level (sections 9 Future prospects and 10 Conclusions).
- For technical reasons, the country-level future trends for Range, Population and Habitat for the species are only available in a separate spreadsheet that contains all the country-level supporting information.
- The country-level reporting information for all habitats and species is also available in spreadsheet format.

Visit the JNCC website, https://jncc.gov.uk/article17, for further information on UK Article 17 reporting.

Report on the main results of the surveillance under Article 11 for Annex II, IV and V species (Annex B)

NATIONAL LEVEL

1. General information

1.1 Member State	**UK (England information only)**
1.2 Species code	**1044**
1.3 Species scientific name	**Coenagrion mercuriale**
1.4 Alternative species scientific name	
1.5 Common name (in national language)	Southern damselfly

2. Maps

2.1 Sensitive species	No
2.2 Year or period	2015-2016
2.3 Distribution map	Yes
2.4 Distribution map Method used	Complete survey or a statistically robust estimate
2.5 Additional maps	No

3. Information related to Annex V Species (Art. 14)

3.1 Is the species taken in the wild/exploited?	No	
3.2 Which of the measures in Art. 14 have been taken?	a) regulations regarding access to property	No
	b) temporary or local prohibition of the taking of specimens in the wild and exploitation	No
	c) regulation of the periods and/or methods of taking specimens	No
	d) application of hunting and fishing rules which take account of the conservation of such populations	No
	e) establishment of a system of licences for taking specimens or of quotas	No
	f) regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens	No
	g) breeding in captivity of animal species as well as artificial propagation of plant species	No
	h) other measures	No

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3.3 Hunting bag or quantity taken in the wild for Mammals and Acipenseridae (Fish)

a) Unit

b) Statistics/ quantity taken	Provide statistics/quantity per hunting season or per year (where season is not used) over the reporting period					
	Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
Min. (raw, ie. not rounded)						
Max. (raw, ie. not rounded)						
Unknown	No	No	No	No	No	No

3.4. Hunting bag or quantity taken in the wild Method used

3.5. Additional information

BIOGEOGRAPHICAL LEVEL

4. Biogeographical and marine regions

4.1 Biogeographical or marine region where the species occurs

Atlantic (ATL)

4.2 Sources of information

Boyce, D. & Baldock, N. (2015). Monitoring and Management for the Southern Damselfly on Dartmoor 2015. Unpublished report.
Harvey, M.C., Daguet, C., Poland J. & Thomas, J. (2005). Assessment of Favourable Condition for the Southern Damselfly Coenagrion mercuriale on the New Forest candidate Special Area of Comservation (cSAC), Hampshire, England. English Nature/British Dragonfly Society/ Hampshire & Isle of Wight Wildlife Trust.
Insall, C. (2012). An Overview of the Management Requirements of the Southern Damselfly (Coenagrion mercuriale-Charpentier) with Recommendations and Suggested Methodology for Habitat Improvement within and near to the Preseli SAC.Report published by the British Dragonfly Society.
Panter, C. Lake, S. & Liley, D. (2016). Southern damselfly monitoring reports 2015/16. Natural England/ Footprint Ecology.
Purse, B.V. (2002). The Ecology and Conservation of the Southern Damselfly (Coenagrion Mercuriale - Charpentier) in Britain. Environment Agency.

5. Range

5.1 Surface area (km²)

5.2 Short-term trend Period

5.3 Short-term trend Direction

Stable (0)

5.4 Short-term trend Magnitude

a) Minimum

b) Maximum

5.5 Short-term trend Method used

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5.6 Long-term trend Period		
5.7 Long-term trend Direction		
5.8 Long-term trend Magnitude	a) Minimum	b) Maximum
5.9 Long-term trend Method used		
5.10 Favourable reference range	a) Area (km²) b) Operator c) Unknown d) Method	
5.11 Change and reason for change in surface area of range	Improved knowledge/more accurate data Use of different method The change is mainly due to:	Improved knowledge/more accurate data
5.12 Additional information		

6. Population

6.1 Year or period	2015-2016	
6.2 Population size (in reporting unit)	a) Unit b) Minimum c) Maximum d) Best single value	number of map 1x1 km grid cells (grids1x1) 35
6.3 Type of estimate	Best estimate	
6.4 Additional population size (using population unit other than reporting unit)	a) Unit b) Minimum c) Maximum d) Best single value	
6.5 Type of estimate		
6.6 Population size Method used	Complete survey or a statistically robust estimate	
6.7 Short-term trend Period	2004-2016	
6.8 Short-term trend Direction	Stable (0)	
6.9 Short-term trend Magnitude	a) Minimum b) Maximum c) Confidence interval	
6.10 Short-term trend Method used	Complete survey or a statistically robust estimate	
6.11 Long-term trend Period		
6.12 Long-term trend Direction		
6.13 Long-term trend Magnitude	a) Minimum b) Maximum c) Confidence interval	
6.14 Long-term trend Method used		

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6.15 Favourable reference population (using the unit in 6.2 or 6.4)	a) Population size b) Operator c) Unknown d) Method
6.16 Change and reason for change in population size	No change The change is mainly due to:
6.17 Additional information	A complete survey of all known sites was undertaken in 2015-2016. this was the first such survey in England since 2004, when a full survey of known sites in the New Forest was done. Comparing numbers per 100 m at the New Forest sites in 2004 & 2106, the 2016 numbers were 5% higher than that of 2004, which is not considered significant & hence no change was concluded. No comparitive data were available for the Dorset & Devon sites but the main English population is in the New Forest and these results were considered to be a reasonable estimate for the population as a whole.

7. Habitat for the species

7.1 Sufficiency of area and quality of occupied habitat	a) Are area and quality of occupied habitat sufficient (to maintain the species at FCS)?	Yes
	b) Is there a sufficiently large area of occupied AND unoccupied habitat of suitable quality (to maintain the species at FCS)?	
7.2 Sufficiency of area and quality of occupied habitat Method used	Complete survey or a statistically robust estimate	
7.3 Short-term trend Period	2004-2016	
7.4 Short-term trend Direction	Stable (0)	
7.5 Short-term trend Method used	Complete survey or a statistically robust estimate	
7.6 Long-term trend Period		
7.7 Long-term trend Direction		
7.8 Long-term trend Method used		
7.9 Additional information	Overall the quality of the habitat currently supporting the species is sufficient, although some sites could do with additional management to improve the quality - this mostly relates to managing overhanging vegetation causing shading - 17% of the sites were shaded by 20% or more of the survey length and this, while not causing a significant problem at present, requires management in order to prevent this becoming an issue in the future. There were only a few sites surveyed which did not support the species, and this was considered to be due to inappropriate management (in terms of shading of streams/ runnels or of inappropriate water levels (mainly too dry).	

8. Main pressures and threats

8.1 Characterisation of pressures/threats

Pressure	Ranking
Abiotic natural processes (e.g. erosion, silting up, drying out, submersion, salinization) (L01)	M

Abandonment of grassland management (e.g. cessation of grazing or mowing) (A06)	M

Threat	Ranking
Abiotic natural processes (e.g. erosion, silting up, drying out, submersion, salinization) (L01)	M
Abandonment of grassland management (e.g. cessation of grazing or mowing) (A06)	M

8.2 Sources of information

8.3 Additional information

Drying up of the slow-running, shallow streams in its heathland habitat is a threat - at present
AO6 is the closest pressure I could find from the drop down list. The pressure is actually overshading of its watercourse habitat thriough inadequate management of overhanging trees/ scrub.

9. Conservation measures

9.1 Status of measures

a) Are measures needed? Yes

b) Indicate the status of measures Measures identified and taken

9.2 Main purpose of the measures taken

Maintain the current range, population and/or habitat for the species

9.3 Location of the measures taken

Both inside and outside Natura 2000

9.4 Response to the measures

Short-term results (within the current reporting period, 2013-2018)

9.5 List of main conservation measures

Management of habitats (others than agriculture and forest) to slow, stop or reverse natural processes (CL01)

Other measures related to natural processes (CL04)

9.6 Additional information

At most of the sites, conservation measures have been identified and taken, and are sufficient to support the species as long as management continues. Where shading is more than 20% of the transect length (on 16% of sites surveyed), there is a potential issue and management should be taken to reduce this.

10. Future prospects

10.1 Future prospects of parameters

a) Range
b) Population
c) Habitat of the species

10.2 Additional information

11. Conclusions

11.1. Range

11.2. Population

11.3. Habitat for the species

11.4. Future prospects

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11.5 Overall assessment of Conservation Status	
11.6 Overall trend in Conservation Status	
11.7 Change and reasons for change in conservation status and conservation status trend	a) Overall assessment of conservation status No change The change is mainly due to: b) Overall trend in conservation status No change The change is mainly due to:
11.8 Additional information	

12. Natura 2000 (pSCIs, SCIs and SACs) coverage for Annex II species

12.1 Population size inside the pSCIs, SCIs and SACs network (on the biogeographical/marine level including all sites where the species is present)	a) Unit	number of map 1x1 km grid cells (grids1x1)
	b) Minimum	
	c) Maximum	
	d) Best single value	35
12.2 Type of estimate	Best estimate	
12.3 Population size inside the network Method used	Complete survey or a statistically robust estimate	
12.4 Short-term trend of population size within the network Direction	Stable (0)	
12.5 Short-term trend of population size within the network Method used	Complete survey or a statistically robust estimate	
12.6 Additional information		

13. Complementary information

13.1 Justification of % thresholds for trends	
13.2 Trans-boundary assessment	
13.3 Other relevant Information	

Distribution Map

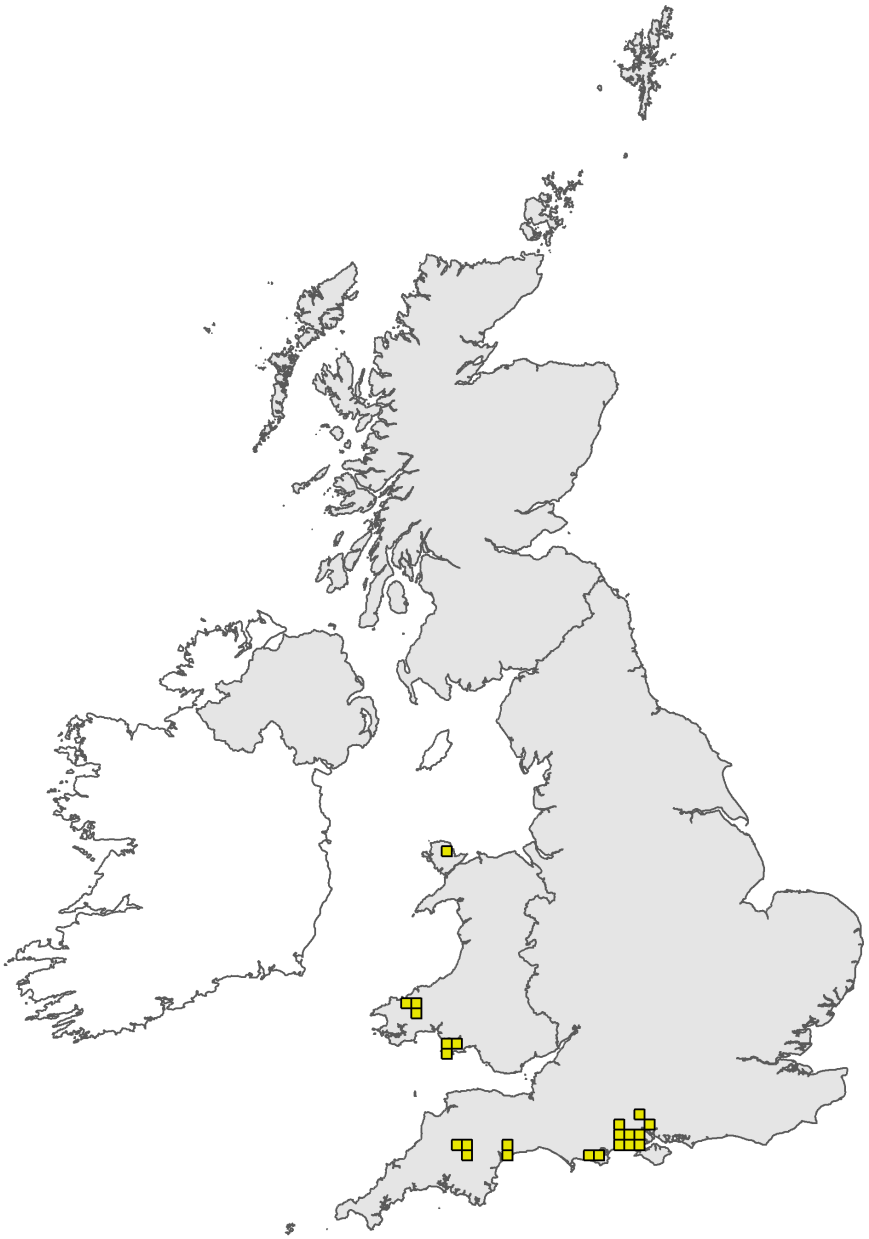

Figure 1: UK distribution map for S1044 - Southern damselfly (*Coenagrion mercuriale*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The 10km grid square distribution map is based on available species records within the current reporting period. For further details see the 2019 Article 17 UK Approach document.

Range Map

Figure 2: UK range map for S1044 - Southern damselfly (*Coenagrion mercuriale*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The range map has been produced by applying a bespoke range mapping tool for Article 17 reporting (produced by JNCC) to the 10km grid square distribution map presented in Figure 1. The alpha value for this species was 20km. For further details see the 2019 Article 17 UK Approach document.

Explanatory Notes

Species name: Coenagrion mercuriale (1044) Region code: ATL

Field label	Note
6.17 Additional information	A complete survey of all known sites was undertaken in 2015-2016. this was the first such survey in England since 2004, when a full survey of known sites in the New Forest was done. Comparing numbers per 100 m at the New Forest sites in 2004 & 2106, the 2016 numbers were 5% higher than that of 2004, which is not considered significant & hence no change was concluded. No comparitive data were available for the Dorset & Devon sites but the main English population is in the New Forest and these results were considered to be a reasonable estimate for the population as a whole..
7.9 Additional information	Overall the quality of the habitat currently supporting the species is sufficient, although some sites could do with additional management to improve the quality - this mostly relates to managing overhanging vegetation causing shading - 17% of the sites were shaded by 20% or more of the survey length and this, while not caussing a significant problem at present, requires management in order to prevent this becoming an issue in the future. There were only a few sites surveyed which did not support the species, and this was considered to be due to inappropriate management (in terms of shading of streams/ runnels or of inappropriate water levels (mainly too dry).
8.3 Additional information	For LO1: Drying up of the slow-running, shallow streams in its heathland habitat is a threat - at present. For AO6: this is the closest pressure I could find from the drop down list. The pressure is actually overshading of its watercourse habitat thriough inadequate management of overhanging trees/ scrub.
9.6 Additional information	At most of the sites, conservation measures have been identified and taken, and are sufficient to support the species as long as management continues. Where shading is more than 20% of the transect length (on 16% of sites surveyed), there is a potential issue and management should be taken to reduce this.