

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

Third Report by the United Kingdom under
Article 17

on the implementation of the Directive
from January 2007 to December 2012
Conservation status assessment for

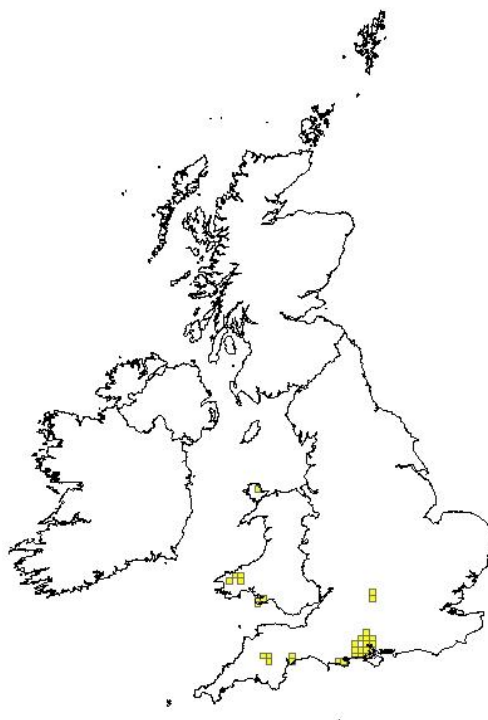
Species:

S1044 - Southern damselfly (*Coenagrion mercuriale*)

Reporting format on the 'main results of the surveillance under Article 11' for Annex II, IV & V species

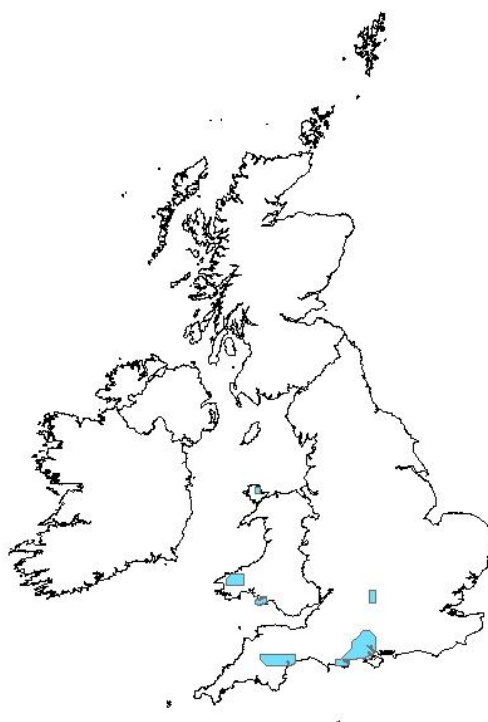
<i>Field name</i>	<i>Brief explanations</i>	
0.2 Species	0.2.1 Species code	S1044
	0.2.2 Species scientific name	<i>Coenagrion mercuriale</i>
	0.2.3 Alternative species scientific name Optional	
	0.2.4 Common name Optional	

1.1 Maps			
1.1.1 Distribution map	True	Sensitive	False
	The distribution map is based on species records which are considered to be representative of the range within the current reporting period. For further details see the 2013 Article 17 UK Approach document.		



1.1.2 Method used - map	Estimate based on partial data with some extrapolation and/or modelling		
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information		
1.1.3 Year or period	2003-2011		
	The distribution map is based on species records which are considered to be representative of the range within the current reporting period. For further details see the 2013 Article 17 UK Approach document.		

1.1.4 Additional distribution map Optional	False
1.1.5 Range map	True The range map was produced by applying the UK range mapping tool to the distribution map presented in 1.1.4. The alpha value for this species was 20km. For further details see the 2013 Article 17 UK Approach document.



2.1 Biogeographical region & marine regions	ATL
2.2 Published sources	<p>Boardman, P. 2005. Assessment of favourable condition for the southern damselfly <i>Coenagrion mercuriale</i> on candidate Special Areas of Conservation in Wales (part 2). Environmental Monitoring Report. 18. Countryside Council for Wales.</p> <p>Boyce, D. 2002. Southern damselfly <i>Coenagrion mercuriale</i> GB site assessment project. CCW Contract Science. 537. UK BAP Southern Damselfly Steering Group.</p> <p>Boyce, D. 2004. Condition assessment for the southern damselfly <i>Coenagrion mercuriale</i> on candidate Special Areas of Conservation in Pembrokeshire (Gweunydd Blaencleddau & Preseli (part)). CCW Contract Science. 627. Countryside Council for Wales.</p> <p>Coker, S. 2002. A long-term plan for <i>Coenagrion mercuriale</i> in north-east Pembrokeshire. Privately published.</p> <p>Hopkins, G.W. & Day, K.J. 1997. The southern damselfly <i>Coenagrion mercuriale</i>: dispersal and adult behaviour. CCW Contract Science. 184. Countryside Council for Wales.</p> <p>Install, C. 2012. An Overview of the Management Requirements of the Southern Damselfly (<i>Coenagrion mercuriale</i>-Charpentier) with Recommendations and</p>

	<p>Suggested Methodology for Habitat Improvement within and near to the Preseli SAC. Unpublished report. British Dragonfly Society.</p> <p>Jenkins, R.A. 1997. Surveys of southern damselfly (<i>Coenagrion mercuriale</i>) on Gower, June/July 1997. File Note:16/7/97. Countryside Council for Wales.</p> <p>Skidmore, P. 1996. A baseline survey of the status of the southern damselfly <i>Coenagrion mercuriale</i> on Mynydd Preseli pSAC. CCW Contract Science. 181. Countryside Council for Wales.</p> <p>Surry, K. 2012. Corsydd Mon SAC Monitoring: <i>Coenagrion mercuriale</i> (1044). Unpublished Report, Countryside Council for Wales.</p> <p>Watts, P.C., Saccheri, I.J., Kemp, S.J. & Thompson, D.J. 2006. Population structure and the impact of regional and local habitat isolation upon levels of genetic diversity of the endangered damselfly <i>Coenagrion mercuriale</i> (Odonata: Zygoptera). <i>Freshwater Biology</i>, 51: 193-205.</p> <p>Wilkinson, K. 2009. Gower Commons SAC Monitoring: <i>Coenagrion mercuriale</i> (1044). Unpublished Report, Countryside Council for Wales.</p> <p>Wilkinson, K. 2011. Preseli SAC & Gweunydd Blaencleddau SAC: <i>Coenagrion mercuriale</i> (1044). Unpublished Report, Countryside Council for Wales.</p> <p>Woodman, J. 2000. A survey of the southern damselfly (<i>Coenagrion mercuriale</i>) on key sites in South Wales, 1997. Unpublished report. Countryside Council for Wales.</p> <p>UK distribution map data sources</p> <p>C. Daguet (pers. comm), BDS Dragonfly Recording Network NBN Gateway data: Dragonfly Recording Network GA000012Extracted by LH 19/09/2012 Dragonfly records from the British Dragonfly Society's Dragonfly Recording Network for the period up to 2011 NE. Emailed to JNCC (LH) by Jon Curson 07/08/2012. All English records 2007-2012 compiled by Stephen Prentice, British Dragonfly Society.</p> <p>UK Distribution Map data sources</p> <p>C. Daguet (pers. comm), BDS Dragonfly Recording Network NBN Gateway data: Dragonfly Recording Network GA000012Extracted by LH 19/09/2012 Dragonfly records from the British Dragonfly Society's Dragonfly Recording Network for the period up to 2011 NE. Emailed to JNCC (LH) by Jon Curson 07/08/2012. All English records 2007-2012 compiled by Stephen Prentice, British Dragonfly Society.</p>
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2.3 Range					
2.3.1 Surface area Range	4140.73 The surface area of the range was calculated from the map presented in 1.1.5. For further details see the 2013 Article 17 UK Approach document.				
2.3.2 Method used Surface area of Range	Estimate based on partial data with some extrapolation and/or modelling For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information				
2.3.3 Short-term trend Period	2001-2012 For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information				
2.3.4 Short term trend Trend direction	stable The short term trend direction was derived by comparing the range map in 1.1.5 with the range map produced in the 2007 report, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.				
2.3.5 Short-term trend Magnitude Optional	<table border="1"> <tr> <td>a) Minimum</td> <td></td> </tr> <tr> <td>b) Maximum</td> <td></td> </tr> </table>	a) Minimum		b) Maximum	
a) Minimum					
b) Maximum					
2.3.6 Long-term trend Period Optional	1989-2012 For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information				
2.3.7 Long-term trend Trend direction Optional	unknown The long term trend direction was derived by comparing the range map in 1.1.5 with the range map produced in the 2007 report, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.				
2.3.8 Long-term trend Magnitude Optional	<table border="1"> <tr> <td>a) Minimum</td> <td></td> </tr> <tr> <td>b) Maximum</td> <td></td> </tr> </table>	a) Minimum		b) Maximum	
a) Minimum					
b) Maximum					
2.3.9 Favourable reference range	<table border="1"> <tr> <td>a) Value in km²</td> <td>3941</td> </tr> </table> The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. For further details see the 2013 Article 17 UK Approach document.	a) Value in km²	3941		
a) Value in km²	3941				

	b) Operator for FRR	
	c) FRR is unknown (indicated by "true")	False
	d) Method used to set FRR	The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. The value is considered to be large enough to support a viable population and no lower than the range estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document.
		The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. The value is considered to be large enough to support a viable population and no lower than the range estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document.
2.3.10 Reason for change Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to...	a) Genuine change?	True
	It is uncertain whether the very small increase in range is genuine or due to better data.	
	b) Improved knowledge/more accurate data?	True
	It is uncertain whether the very small increase in range is genuine or due to better data.	
	c) Use of different method (e.g. "Range tool")?	False
	Use of a revised UK range mapping tool had little effect on the calculation for surface area of range.	

2.4 Population		
2.4.1 Population size estimation (using individuals or agreed exceptions where possible)	a) Unit	
	b) Minimum	
	c) Maximum	
2.4.2 Population size estimation (using population unit other than individuals)	a) Unit	number of map 1x1 km grid cells
	The population unit is the same as reported in 2007.	

Optional (<i>if 2.4.1 filled in</i>)	b) Minimum	60
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
	c) Maximum	141
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
2.4.3 Additional information on population estimates / conversion Optional	a) Definition of "locality"	
	b) Method to convert data	
	c) Problems encountered to provide population size estimation	There is insufficient information available to give a precise estimate.
For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information		
2.4.4 Year or period	2007-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
2.4.5 Method used Population size	Estimate based on partial data with some extrapolation and/or modelling	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
2.4.6 Short-term trend Period	2001-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
2.4.7 Short-term trend Trend direction	decrease 1% or less/year	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
2.4.8 Short-term trend Magnitude Optional	a) Minimum	
	b) Maximum	
	c) Confidence interval	
2.4.9 Short-term trend Method used	Estimate based on partial data with some extrapolation and/or modelling	

	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
2.4.10 Long-term trend – Period	1989-2012	
	Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information
2.4.11 Long-term trend Trend direction	decrease 1% or less/year	
	Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information
2.4.12 Long-term trend Magnitude	Optional	a) Minimum
		b) Maximum
		c) Confidence interval
2.4.13 Long term trend Method used	Estimate based on partial data with some extrapolation and/or modelling	
	Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information
2.4.14 Favourable reference population	a) Number of individuals/agreed exceptions/other units	110
	The FRV for population is the same as reported in 2007.	
	b) Operator	
	c) FRP is unknown (indicated by "true")	False
	d) Method used to set FRP	The favourable reference value is the same as used in the 2007 Article 17 report. The value is considered to be large enough for the population to be viable and no lower than the population estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
The favourable reference value is the same as used in the 2007 Article 17 report. The value is considered to be large enough for the		

	population to be viable and no lower than the population estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.15 Reason for change Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	a) Genuine change?	False
	The population reported in 2007 is within the range of the currently estimated population.	
	b) Improved knowledge/more accurate data?	False
	The population reported in 2007 is within the range of the currently estimated population.	
	c) Use of different method (e.g. "Range tool")?	False
	The population reported in 2007 is within the range of the currently estimated population.	

2.5 Habitat for the species		
2.5.1 Area estimation	The specific area of habitat occupied by this species in the UK is unknown.	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	There is thought to be a sufficient amount of habitat in the UK to support a viable population of the species.	
2.5.2 Year or period	2001-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.3 Method used Habitat for the species	Absent data	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.4 Quality of the habitat	a) Habitat quality	Good
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	b) Assessment method	Quality assessed using anecdotal evidence from habitat assessments on a selection of sites in the New Forest and Dorset, and more detailed survey work in Wales.
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	

2.5.5 Short-term trend Period	2001-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.6 Short-term trend Trend direction	decrease	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.7 Long-term trend Period Optional	1989-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.8 Long-term trend Trend direction Optional	decrease	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.9 Area of suitable habitat for the species	a) Value in km²	
	b) Absence of data indicated as '0'	
2.5.10 Reason for change Is the difference between the value reported at 2.5.1 and the previous reporting round mainly due to	a) Genuine change?	False
	Surface area of habitat is unknown so no comparison is possible.	
	b) Improved knowledge/more accurate data?	False
	Surface area of habitat is unknown so no comparison is possible.	
	c) Use of different method (e.g. "Range tool")?	False
	Surface area of habitat is unknown so no comparison is possible.	

2.6 Main pressures		
a) Pressure	b) Ranking	c) Pollution qualifier
	H = high importance (max 5 entries) M = medium importance L = low importance	
A04: grazing	H	
A03: mowing / cutting of grassland	M	
H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	M	
J02: human induced changes in hydraulic conditions	M	
H02: Pollution to groundwater (point sources and diffuse	L	

sources)		

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

2.6.1 Method used – Pressures

mainly based on expert judgement and other data

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

2.7 Threats

a) Threat	b) Ranking	c) Pollution qualifier
	H = high importance (max 5 entries) M = medium importance L = low importance	
A04: grazing	H	
A03: mowing / cutting of grassland	M	
H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	M	
J02: human induced changes in hydraulic conditions	M	
A07: use of biocides, hormones and chemicals	L	
H02: Pollution to groundwater (point sources and diffuse sources)	L	

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

2.7.1 Method used – Threats

expert opinion

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

2.8 Complementary information

2.8.1 Justification of % thresholds for trends

2.8.2 Other relevant

information	
2.8.3 Trans-boundary assessment	

2.9 Conclusions (<i>assessment of conservation status at end of reporting period</i>)	
2.9.1 Range	a) Conclusion Favourable
	Range has been assessed as Favourable because surface area of range is greater than the FRV for range, and short term trend direction is stable.
	b) Qualifier
2.9.2 Population	a) Conclusion Inadequate
	Population has been assessed as inadequate because average value of the min and max population estimates is just under the value for the FRP, and the short term trend is decline, but by less than 1% per year.
	b) Qualifier declining
	The qualifier is decline because the short term population trend is a slight decline.
2.9.3 Habitat for the species	a) Conclusion Inadequate
	Habitat for species has been assessed as Inadequate. There is thought to be sufficient habitat to support a viable population, the habitat quality is good, but the short term trend is declining.
	b) Qualifier declining
2.9.4 Future prospects	a) Conclusion Unknown
	Future prospects is assessed as unknown on the basis of assessments of the future prospects of the three parameters, range, population and habitat for species: Range future prospects: Good Population future prospects: Unknown Habitat future prospects:Unknown Overall future prospects: Unknown Population and habitat prospects for this species are very dependent on appropriate habitat management, particularly of grazing pressures, and the extent of this is currently not known for many populations.
	b) Qualifier

2.9.5 Overall assessment of Conservation Status	Inadequate
	The overall assessment is Inadequate because population is assessed as Inadequate.
2.9.6 Overall trend in Conservation Status	declining
	On balance, the overall trend is declining

3 Natura 2000 coverage & conservation measures - Annex II species (only applies to species listed under Annex II of the Directive)

3.1 Population		
3.1.1 Population size Estimation of population size included in the SAC network	a) Unit	number of map 1x1 km grid cells
	b) Minimum	60
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	c) Maximum	82
For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.		
3.1.2 Method used	Estimate based on partial data with some extrapolation and/or modelling	
For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.		
3.1.3 Trend of population size within the network (short-term trend) Optional	decrease	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	

3.2 Conservation measures				
Conservation measures taken (i.e. already being implemented) within the reporting period and provided information about their importance, location and evaluation.				
3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad evaluation of the measure
		H = high importance	where the measure is PRIMARILY applied	

	a) Legal/statutory	b) Administrative	c) Contractual	d) Recurrent	e) One-off	M = medium importance L = low importance	a) Inside	b) Outside	c) Both inside & outside	a) Maintain	b) Enhance	c) Long term	d) No effect	e) Unknown	f) Not evaluated
1.2: Measures needed, but not implemented				Y		L	Y					Y			
2.1: Maintaining grasslands and other open habitats				Y		H			Y		Y				
4.1: Restoring/improving water quality					Y	M			Y		Y				
4.2: Restoring/improving the hydrological regime					Y	M			Y		Y				
6.1: Establish protected areas/sites					Y	L		Y				Y			
6.3: Legal protection of habitats and species					Y	L			Y		Y				

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.