

**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

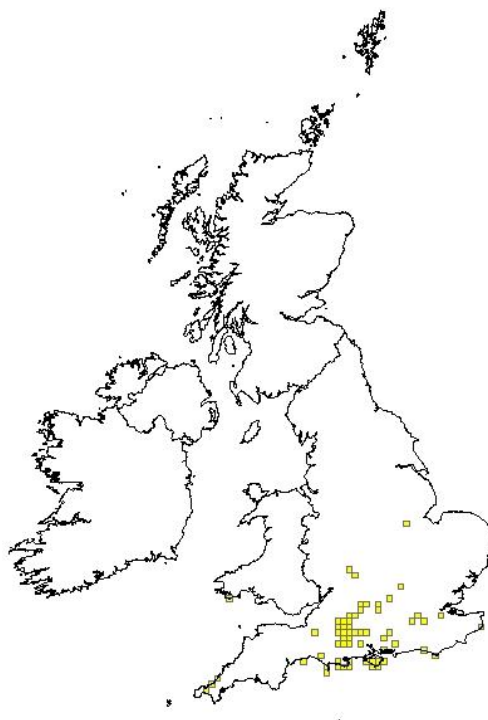
Species:

S1654 - Early gentian (*Gentianella anglica*)

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	S1654
	0.2.2 Species scientific name	<i>Gentianella anglica</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	2000-2011
	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 using by applying the alpha hull range 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>BSBI mapping scheme hectad map. Http://www.bsbimaps.org.uk/atlas/map_page.php?spid=899.0</p> <p>Online Atlas of the British and Irish Flora, <i>Gentianella anlica</i>, (Early Gentian). Http://www.brc.ac.uk/plantatlas/index.php?q=node/1585</p> <p>PLANTLIFE 2006. Back from the Brink Species Briefing Sheet Early Gentian <i>Gentianella anglica</i>. Plantlife http://www.plantlife.org.uk/uploads/documents/Brief%20sheet%20-%20Early%20gentian%20Gentianella_briefing_sheet.pdf</p> <p>PRESTON, C.D., PEARMAN, D.A. & DINES, T.D. 2002. New Atlas of the British & Irish Flora. Oxford University Press.</p> <p>Rees, I. & Rich, T.C.G. (2012) Spring flowering by <i>Gentianella amarella</i> s.l. in Anglesey (v.c.52) pp.43-4. BSBI News (121)</p> <p>Sell, P.D. & Murrell J.G. (2009) Flora of Great Britain and Ireland, Volume 3: Mimosaceae - Lentibulariaceae. CUP Cambridge.</p> <p>Stace, C.A. (2010) New Flora of the British Isles. `3rd ed. CUP Cambridge.</p>

	<p>STEWART, A., PEARMAN, D.A. & PRESTON, C.D. 1994. Scarce Plants in Britain. Peterborough: Joint Nature Conservation Committee</p> <p>Wilkinson, K. (2009) Limestone Coast of South West Wales SAC Monitoring. <i>Gentianella anglica</i> (1654) Monitoring Round 2 (2007-2012). Countryside Council for Wales internal report.</p> <p>Wilson, P. J. (1999) The distribution and status of <i>Gentianella anglica</i> (Pugsley) E. Warb. English Nature Species Recovery Programme/ Plantlife (Back from the Brink Project) Report No. 119</p> <p>WILSON, P.J. 2000. Early gentian <i>Gentianella anglica</i> (Pugsley) E. Warb.: survey and monitoring work in 1999. English Nature Species Recovery Programme/ Plantlife Report, No. 147</p> <p>Wilson, P. J., 2009. A Sample Survey of Sites for <i>Gentianella anglica</i> in England in 2008</p> <p>WINFIELD, M. & PARKER, J. 2000. A molecular analysis of <i>Gentianella</i> in Britain. English Nature Species Recovery Programme/ Plantlife Report, No. 155</p> <p>UK distribution map data sources</p> <p>BIS CCW - HQ Terr - Rare Flowering Plants and Fern Data Emailed to JNCC (no details) Summer 2012</p> <p>BSBI BSBI:VPDB: Atlas2000 records on disc via Trevor Dines BSBI MAPMATE database (includes import from several data centres)</p> <p>BSBI Vascular Plant Database. Atlas2000 - updated records from December 1995 onwards. Sent to JNCC 18/7/2012</p> <p>BSBI vascular plants database</p> <p>BSBI: Ashmolean Natural History Society (1999-2004) 2004 Sent to JNCC 18/7/2012</p> <p>BSBI: Kent records imported from Eric Philp's Recorder 3 database Sent to JNCC 18/7/2012</p> <p>BSBI: Plantlife (1990-2009)) 2009 Sent to JNCC 18/7/2012</p> <p>BSBI: Pope, C.R. (2000-2007) 2007 Sent to JNCC 18/7/2012</p> <p>BSBI: Wigginton, M.J. (1995) 1995 Sent to JNCC 18/7/2012</p> <p>BSBI: Campbell, J.M. (2000) 2000 Sent to JNCC 18/7/2012</p> <p>BSBI: Vascular Plant Database, Atlas2000 master cards. Sent to JNCC 18/07/2012</p> <p>BSBI: Vascular Plant Database. Scarce Plant Project Sent to JNCC 18/7/2012</p> <p>BSBI: Vascular Plant Database. Vascular plants: Dorset RPR data Sent to JNCC 18/7/2012</p> <p>Emailed to JNCC (LH) 10th Oct 2012 by John Martin (NE) email communication with E Cornwall recorder</p> <p>NBN Gateway data: Hampshire Biodiversity Information Centre GA001133 Extracted by LH 13/09/2012 HBIC Protected and notable species</p> <p>NBN Gateway data: National Trust GA001105 Extracted by LH 13/09/2012 Extract of National Trust species database covering Article 17 species</p> <p>Plantlife records 2008 Emailed to JNCC (DC) by TH 18/07/2012</p> <p>UK Distribution Map data sources</p>
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	<p>BIS CCW - HQ Terr - Rare Flowering Plants and Fern Data Emailed to JNCC (no details) Summer 2012</p> <p>BSBI BSBI:VPDB: Atlas2000 records on disc via Trevor Dines</p> <p>BSBI MAPMATE database (includes import from several data centres)</p> <p>BSBI Vascular Plant Database. Atlas2000 - updated records from December 1995 onwards. Sent to JNCC 18/7/2012</p> <p>BSBI vascular plants database</p> <p>BSBI: Ashmolean Natural History Society (1999-2004) 2004 Sent to JNCC 18/7/2012</p> <p>BSBI: Kent records imported from Eric Philp's Recorder 3 database Sent to JNCC 18/7/2012</p> <p>BSBI: Plantlife (1990-2009)) 2009 Sent to JNCC 18/7/2012</p> <p>BSBI: Pope, C.R. (2000-2007) 2007 Sent to JNCC 18/7/2012</p> <p>BSBI: Wigginton, M.J. (1995) 1995 Sent to JNCC 18/7/2012</p> <p>BSBI: Campbell, J.M. (2000) 2000 Sent to JNCC 18/7/2012</p> <p>BSBI: Vascular Plant Database, Atlas2000 master cards. Sent to JNCC 18/07/2012</p> <p>BSBI: Vascular Plant Database. Scarce Plant Project Sent to JNCC 18/7/2012</p> <p>BSBI: Vascular Plant Database. Vascular plants: Dorset RPR data Sent to JNCC 18/7/2012</p> <p>Emailed to JNCC (LH) 10th Oct 2012 by John Martin (NE) email communication with E Cornwall recorder</p> <p>NBN Gateway data: Hampshire Biodiversity Information Centre GA001133 Extracted by LH 13/09/2012 HBIC Protected and notable species</p> <p>NBN Gateway data: National Trust GA001105 Extracted by LH 13/09/2012 Extract of National Trust species database covering Article 17 species</p> <p>Plantlife records 2008 Emailed to JNCC (DC) by TH 18/07/2012</p>
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2.3 Range	
2.3.1 Surface area Range	<p>14673.47</p> <p>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.</p>
2.3.2 Method used Surface area of Range	<p>Estimate based on partial data with some extrapolation and/or modelling</p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>
2.3.3 Short-term trend Period	<p>2001-2012</p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>
2.3.4 Short term trend Trend direction	<p>stable</p> <p>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, and by considering the range trend in the 2007 report.</p>
2.3.5 Short-term trend Magnitude	<p>a) Minimum</p>

Optional		
	b) Maximum	
2.3.6 Long-term trend Period	1989-2012	
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.3.7 Long-term trend Trend direction	stable	
Optional	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	a) Minimum	
	b) Maximum	
2.3.9 Favourable reference range	a) Value in km²	12407
	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.	
	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?	False
	The slight increase in range is not thought to be genuine but as a result of better data.	
	b) Improved knowledge/more accurate data?	True
	The slight increase in range is not thought to be genuine but as a result of better data.	
	c) Use of different method (e.g. "Range tool")?	False
	The slight increase in range is not thought to be genuine but as a result of better data.	

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) Optional (<i>if 2.4.1 filled in</i>)	a) Unit	number of localities
	The population unit is the same as reported in 2007.	
	b) Minimum	82
	c) Maximum	82
2.4.3 Additional information on population estimates / conversion Optional	a) Definition of "locality"	Localities have been defined as sites bearing different names, without subsites.
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	b) Method to convert data	
	c) Problems encountered to provide population size estimation	
2.4.4 Year or period	2000-2012	

		For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
2.4.5 Method used		Estimate based on partial data with some extrapolation and/or modelling
Population size		For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
2.4.6 Short-term trend		2001-2012
Period		For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
2.4.7 Short-term trend		decrease
Trend direction		For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
2.4.8 Short-term trend	Optional	a) Minimum
Magnitude		
		b) Maximum
		c) Confidence interval
2.4.9 Short-term trend		Estimate based on partial data with some extrapolation and/or modelling
Method used		For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
2.4.10 Long-term trend –		1989-2012
Period	Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
2.4.11 Long-term trend		decrease
Trend direction	Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
2.4.12 Long-term trend	Optional	a) Minimum
Magnitude		
		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		
2.4.14 Favourable reference population	a) Number of individuals/agreed exceptions/other units	154
	The FRV for population is the same as reported in 2007. 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.	
	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?	True
	The decrease in population is thought to be partly a genuine change and partly due to different data. For more detail, see country audit notes.	
	b) Improved knowledge/more accurate data?	True
	The decrease in population is thought to be partly a genuine change and partly due to different data. For more detail, see country audit notes.	

	c) Use of different method (e.g. "Range tool")?	False
The decrease in population is thought to be partly a genuine change and partly due to different data. For more detail, see country audit notes.		

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. It is unknown whether the amount of habitat in the UK is sufficient to support a viable population of the species.	
2.5.2 Year or period	2007-2012 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	Moderate
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	b) Assessment method	The plant occupies a subset of calcereous grassland habitat within its limited range in southern Britain. Quality was assessed through common standards monitoring of protected sites, and surveys of the presence and absence of <i>Gentianella anglica</i> (sensu lato), dominant species cover / bare ground and presence / absence of defined indicator species.
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	stable For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.7 Long-term trend Period	1989-2012 For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.8 Long-term trend	unknown	

Trend direction Optional	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	
K02: Biocenotic evolution, succession	H	
H04: Air pollution, air-borne pollutants	M	N
A02:	L	

2.6.1 Method used – Pressures	mainly based on expert judgement and other data
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2.7 Threats		
a) Threat	b) Ranking	c) Pollution qualifier
	H = high importance (max 5 entries) M = medium importance L = low importance	

A04:	H	
K02: Biocenotic evolution, succession	H	
H04: Air pollution, air-borne pollutants	M	
A02:	L	
A08: Fertilisation	L	
B01: forest planting on open ground	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 (*assessment of conservation status at end of reporting period*)

2.9.1 Range

a) Conclusion

Favourable

Range has been assessed as Favourable because range is greater than FRV and the short term range trend is stable.

b) Qualifier

2.9.2 Population

a) Conclusion

Bad

Population has been assessed as Bad because the population estimate is more than 25% below the FRV for population. However, note there is some uncertainty around this because recent records are incomplete, and the current population may be closer to the FRV than records suggest. The short term trend is declining. Note, however, the decline is not as much as appears since some of the decrease is accounted for by a lack

	of recent records.	
	b) Qualifier	declining
2.9.3 Habitat for the species	a) Conclusion	Unknown
	Habitat for species has been assessed as unknown because is is unknown whether there is sufficient habitat to support a viable population, although the trend is stable, and the habitat quality moderate. The plant only uses a subset of the broader habitat its found in, which is not directly assessed.	
	b) Qualifier	
2.9.4 Future prospects	a) Conclusion	Inadequate
	Future prospects is assessed as Inadequate 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: Poor Habitat future prospects: Unknown Overall future prospects: Inadequate A number of the sites contain very small populations, or are highly fragmented, and these are at high risk of loss.	
	b) Qualifier	stable
	Management of calcereous grassland habitats in general likely to benefit this species; much of remaining population found in protected areas. However, there are still continuing pressures and threats affecting this species, suggesting that the future trend is best classed as stable.	
2.9.5 Overall assessment of Conservation Status	Bad	
	The overall assessment is Bad because population is assessed as Bad. However, note uncertainty around the extent of the decline and how much below the FRV the current population is.	
2.9.6 Overall trend in Conservation Status	stable	
	On balance, the overall trend is stable.	

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	
	b) Minimum	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	c) Maximum	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
3.1.2 Method used	Absent data 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	unknown 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 H = high importance M = medium importance L = low importance	3.2.4 Location where the measure is PRIMARILY applied			3.2.5 Broad evaluation of the measure					
	a) Legal/statutory	b) Administrative	c) Contractual	d) Recurrent	e) One-off		a) Inside	b) Outside	c) Both inside & outside	a) Maintain	b) Enhance	c) Long term	d) No effect	e) Unknown	f) Not evaluated
2.1: Maintaining grasslands and other open habitats		Y		Y		H			Y			Y			Y
6.1: Establish protected areas/sites	Y					H			Y		Y				

6.3: Legal protection of habitats and species	Y					L			Y		Y				
8.0: Other measures		Y				L	Y							Y	

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