

**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

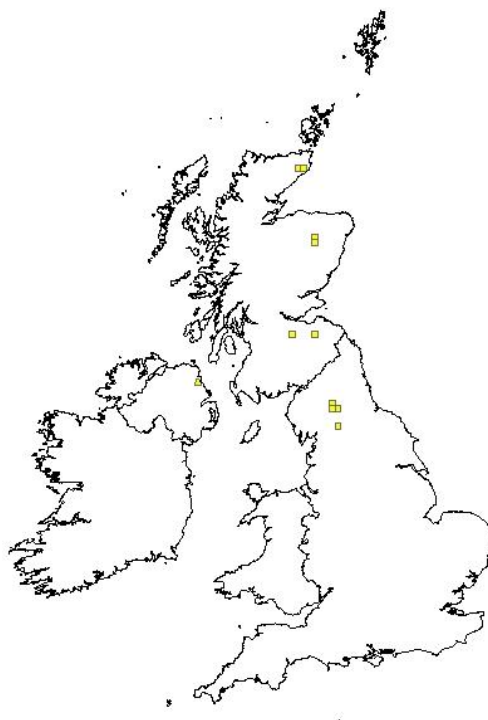
Species:

S1528 - Marsh saxifrage (*Saxifraga hirculus*)

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

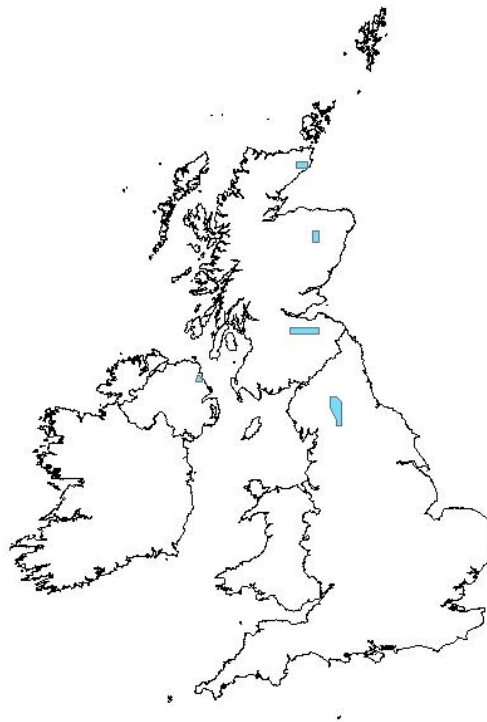
<i>Field name</i>	<i>Brief explanations</i>	
0.2 Species	0.2.1 Species code	S1528
	0.2.2 Species scientific name	<i>Saxifraga hirculus</i>
	0.2.3 Alternative species scientific name Optional	
	0.2.4 Common name Optional	

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	Complete survey/Complete survey or a statistically robust estimate
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
1.1.3 Year or period	1999-2011
	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>Hackney, P. 1992 Flora of the North-east of Ireland. Third Edition. Institute of Irish Studies, the Queen's University of Belfast.</p> <p>Joint Nature Conservation Council 2010. UK priority species pages - Version 2 Saxifraga hirculus version 2.</p> <p>KELLY, P. 1999. Survey of the historic localities of Saxifraga hirculus. Report to English Nature.</p> <p>PRESTON. C. D., PEARMAN, D.A. & DINES, T.D. 2002. New Atlas of the British and Irish Flora. Oxford University Press</p> <p>ROBERTS, F. J., 2009. Marsh Saxifrage, Saxifraga hirculus, Status of English sites in 2009. report commissioned for Natural England.</p> <p>ROBINSON, L.M. (2008) The discovery of Alopecurus borealis and Carex vaginata in the Yorkshire Dales (VC65) with observations on Saxifraga hirculus. B.S.B.I. News, 107, 6-7.</p> <p>Ken Butler. The Rare and Scarce Plants of Caithness. Version 1.1. Botanical Society of the British Isles. 2011. Online publication: www.bsbi.org.uk/CaithnessRPR2011.pdf</p> <p>UK distribution map data sources</p>

	<p>BSBI MAPMATE database (includes import from several data centres) BSBI: Scottish Natural Heritage (1992-2010) 2010 Sent to JNCC 18/7/2012 BSBI: Threatened Plant Database (1836-2010)) 2010 Sent to JNCC 18/7/2012 BSBI:Vascular Plant Database, Atlas2000 master cards. Sent to JNCC 18/07/2012 BSBI:Vascular Plant Database, Threatened Plant Database records from Alex Lockton Sent to JNCC 18/7/2012 BSBI:Vascular Plant Database. Martin Wigginton's Red Data Book data Sent to JNCC 18/7/2012 NBN Gateway data: extracted by LH 11/09/2012 Botanical Society of the British Isles GA000091 Vascular Plants Database</p> <p>UK Distribution Map data sources</p> <p>BSBI MAPMATE database (includes import from several data centres) BSBI: Scottish Natural Heritage (1992-2010) 2010 Sent to JNCC 18/7/2012 BSBI: Threatened Plant Database (1836-2010)) 2010 Sent to JNCC 18/7/2012 BSBI:Vascular Plant Database, Atlas2000 master cards. Sent to JNCC 18/07/2012 BSBI:Vascular Plant Database, Threatened Plant Database records from Alex Lockton Sent to JNCC 18/7/2012 BSBI:Vascular Plant Database. Martin Wigginton's Red Data Book data Sent to JNCC 18/7/2012 NBN Gateway data: extracted by LH 11/09/2012 Botanical Society of the British Isles GA000091 Vascular Plants Database</p>
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2.3 Range	
2.3.1 Surface area Range	<p>1746.56</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>Complete survey/Complete survey or a statistically robust estimate</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>
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, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies.</p>

	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	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	stable	
	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	a) Minimum	
	b) Maximum	
2.3.9 Favourable reference range	a) Value in km²	1300
	The FRV for range is the same as reported in 2007. For further details see the 2013 Article 17 UK Approach document.	
	b) Operator for FRR	
	c) FRR is unknown (indicated by "true")	False
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	d) Method used to set FRR	The favourable reference value is the same as used in the 2007 Article 17 report. 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 favourable reference value is the same as used in the 2007 Article 17 report. 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	23
	c) Maximum	23
2.4.3 Additional information on population estimates / conversion Optional	a) Definition of "locality"	Localities can include a number of different colonies in reasonably close proximity. Localities are separated by larger tracts of unsuitable habitat.
	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	2007-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.5 Method used	Complete survey/Complete survey or a statistically robust estimate	
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	stable	
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	Complete survey/Complete survey or a statistically robust estimate	
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	
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	Complete survey/ Complete survey or a statistically robust estimate	
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	18
	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
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	d) Method used to set FRP	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.
	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.	
2.4.15 Reason for change	a) Genuine change?	False
Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	The increase in population is not thought to be genuine but as a result of better data.	
	b) Improved knowledge/more accurate data?	True
	The increase in population is not thought to be genuine but as a result	

	of better data.	
	c) Use of different method (e.g. "Range tool")?	False
	The increase in population is not thought to be genuine but as a result of better data.	

2.5 Habitat for the species		
2.5.1 Area estimation	<p>The specific area of habitat occupied by this species in the UK is unknown.</p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p> <p>It is unknown whether the amount of habitat in the UK is sufficient to support a viable population of the species.</p>	
2.5.2 Year or period	2009	
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	Based on CSM monitoring of sites.
	For further details of how the quality of habitat was assessed, see country audit trails.	
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		
Optional		
2.5.8 Long-term trend Trend direction		
Optional		
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	
J02: human induced changes in hydraulic conditions	H	
A03: mowing / cutting of grassland	L	
B01: forest planting on open ground	L	
J01: fire and fire suppression	L	
K05: reduced fecundity/ genetic depression	L	

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	
J02:	M	
A03: mowing / cutting of grassland	L	
J01: fire and fire suppression	L	
K05: reduced fecundity/ genetic depression	L	
M01: Changes in abiotic conditions	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

Favourable

Population has been assessed as Favourable because the population is greater than the FRV, and the short term trend is stable

b) Qualifier

2.9.3 Habitat for the species

a) Conclusion

Favourable

	Habitat quality is moderate and trend is stable. Range and population are both favourable, which suggests that habitat is not a major problem for this species.	
	b) Qualifier	
2.9.4 Future prospects	a) Conclusion	Favourable
	<p>Future prospects is assessed as Favourable on the basis of assessments of the future prospects of the three parameters, range, population and habitat for species:</p> <p>Range future prospects: Good</p> <p>Population future prospects: Good</p> <p>Habitat future prospects: Good</p> <p>Overall future prospects: Favourable.</p> <p>Main threats to the species are from grazing and changes in hydraulic conditions. and these should be mitigated by the conservation measures in place.</p>	
	b) Qualifier	
2.9.5 Overall assessment of Conservation Status	Favourable	
	Overall assessment is Favourable because all parameter assessments are Favourable.	
2.9.6 Overall trend in Conservation Status		

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	a) Unit	number of localities
Estimation of population size included in the SAC network	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	b) Minimum	21
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	

	c) Maximum	21
	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)	stable	
Optional	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	Y	Y		H			Y	Y	Y	Y			
4.2: Restoring/improving the hydrological regime	Y			Y		L	Y			Y	Y	Y			
6.0: Other spatial measures	Y					L			Y						Y
6.1: Establish protected areas/sites	Y					H	Y			Y					

6.3: Legal protection of habitats and species	Y					M			Y	Y				
7.4: Specific single species or species group management measures	Y			Y		L	Y			Y	Y	Y		

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