

**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

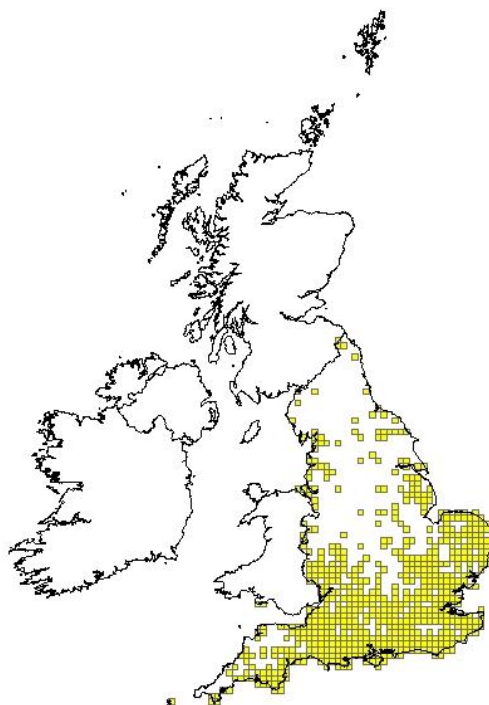
Species:

S1849 - Butcher's broom (*Ruscus aculeatus*)

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

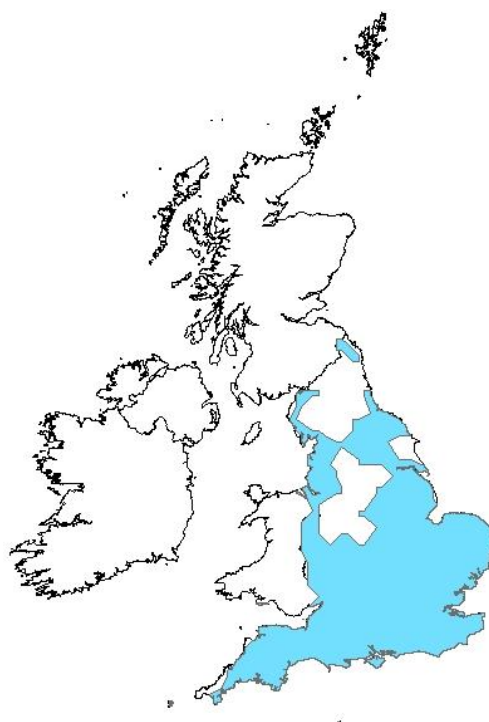
<i>Field name</i>	<i>Brief explanations</i>	
0.2 Species	0.2.1 Species code	S1849
	0.2.2 Species scientific name	<i>Ruscus aculeatus</i>
	0.2.3 Alternative species scientific name Optional	
	0.2.4 Common name Optional	

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	1999-2012
	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 atlas: http://www.bsbimaps.org.uk/atlas/map_page_dc4.php?spid=1760.0&spname=Ruscus%20aculeatus&commname=Butcher%20broom bsbidb.org.uk</p> <p>Biological Records Centre. Online Atlas of the British Flora , Ruscus aculeatus, Butcher's-broom http://www.brc.ac.uk/plantatlas/index.php?q=plant/ruscus-aculeatus</p> <p>Kay, Q.O.N. (2003) Glamorgan County Rare Plant Register (Unpublished draft). Botanical Society of the British Isles.</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>PRESTON, C.D., PEARMAN, D.A. & DINES, T.D. 2002. New Atlas of the British & Irish Flora. Oxford University Press.</p> <p>Wade, A.E., Kay, Q.O.N. & Ellis, R.G. (1994) Flora of Glamorgan. H.M.S.O.</p> <p>UK distribution map data sources</p> <p>BIS CCW Phase1 Habitat Survey Montgomeryshire Target notes Emailed to JNCC (no details) Summer 2012</p>

	<p>BIS sent directly to JNCC (no details) SurveyName Montgomeryshire Vascular Plants VC47 June 2011</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: Plantlife (1990-2009)) 2009 Sent to JNCC 18/7/2012</p> <p>BSBI:Vascular Plant Database Bedfordshire Botanical Database 1987-2005, from Chris Boon, ed by C Preston December 2006 Sent to JNCC 18/7/2012</p> <p>BSBI:Vascular Plant Database BSBI Local Change database (2002-2004) Sent to JNCC 18/07/2012</p> <p>BSBI:Vascular Plant Database Flora of Norfolk 1999. Sent to JNCC 18/07/2012.</p> <p>BSBI:Vascular Plant Database sent to JNCC 18/07/2012</p> <p>BSBI:Vascular Plant Database Tetrad flora data NE Essex Sent to JNCC 18/7/2012</p> <p>BSBI:Vascular Plant Database, The Atlas of the Flora of Somerset 1997. Sent to JNCC 18/07/2012</p> <p>BSBI:Vascular Plant Database, Atlas2000 master cards. Sent to JNCC 18/07/2012</p> <p>BSBI:Vascular Plant Database. Atlas of the British Flora (Monitoring Scheme squares) Sent to JNCC 18/07/2012</p> <p>BSBI:Vascular Plant Database. Data from Isle of Wight Flora (Pope, Snow & Allen 2003) sent by Alex Lockton on 23/07/2006 Sent to JNCC 18/7/2012</p> <p>BSBI:VPDB: updated records from December 1995 onwards Handlist of the Shropshire Flora. Shrewsbury. 1957. Sent to JNCC 18/07/2012</p> <p>Flora of Suffolk Emailed to JNCC (DC) by TH 18/07/2012</p> <p>Hertfordshire Flora Survey Records 1986-2005 Emailed to JNCC (DC) by TH 18/07/2012</p> <p>John Hawksford's Staffordshire database Emailed to JNCC (DC) by TH 18/07/2012</p> <p>LWCKent records imported from Eric Philp's Recorder 3 database. Sent to JNCC 18/07/2012</p> <p>NBN Gateway data: Botanical Society of the British Isles GA000091 Extracted by LH 13/09/2012 Vascular Plants Database</p> <p>NBN Gateway data: Bristol Regional Environmental Records Centre GA001100 Extracted by LH 13/09/2012 BRERC JNCC May 2012</p> <p>NBN Gateway data: Dorset Environmental Records Centre GA000638 Extracted by LH 13/09/2012 Dorset Sites of Nature Conservation Interest (SNCI) species records 2000-2008</p> <p>NBN Gateway data: Herefordshire Biological Records Centre GA001084 Extracted by LH 13/09/2012 Herefordshire Biological Records Centre Species Records</p> <p>NBN Gateway data: National Trust GA000565 Extracted by LH 13/09/2012 Wicken Fen nature reserve species data held by The National Trust</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>
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NBN Gateway data: Rotherham Biological Records Centre GA000843 Extracted by LH 13/09/2012 Rotherham Biological Records Centre - Non-sensitive Records from all taxonomic groups
NBN Gateway data: Shropshire Ecological Data Network GA000693 Extracted by LH 13/09/2012 Shropshire Ecological Data Network Database
NBN Gateway data: Sussex Biodiversity Record Centre GA001076 Extracted by LH 13/09/2012 SxBRC Full dataset for Environment Agency and Natural England use only.
NBN Gateway data: Thames Valley Environmental Records Centre GA000531 Extracted by LH 13/09/2012 Local Wildlife Site Surveys Berkshire
South Lancashire VC59 data from David Earl Emailed to JNCC (DC) by TH 18/07/2012

UK Distribution Map data sources

BIS CCW Phase1 Habitat Survey Montgomeryshire Target notes Emailed to JNCC (no details) Summer 2012
 BIS sent directly to JNCC (no details) Survey Name Montgomeryshire Vascular Plants VC47 June 2011
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2.3 Range	
2.3.1 Surface area Range	<p>104434.15</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>The category for 'method used' was an average of the methods used in the different countries of the UK, weighted by the proportion of the population found in each country.</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>increase</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</p>

	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	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	increase	
	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	26322
	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
	There is negligible difference between the current range and the range reported in 2007. The slight decrease in range is due to exclusion of records from outside the species native range in Wales, NI and Scotland.	
	b) Improved knowledge/ more accurate data?	True
	There is negligible difference between the current range and the range reported in 2007. The slight decrease in range is due to exclusion of records from outside the species native range in Wales, NI and Scotland.	
	c) Use of different method (e.g. "Range tool")?	False
There is negligible difference between the current range and the range reported in 2007. The slight decrease in range is due to exclusion of records from outside the species native range in Wales, NI and Scotland.		

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 map 10x10 km grid cells
	The population unit is the same as reported in 2007.	
	b) Minimum	248
	c) Maximum	622
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	
2.4.4 Year or period	2001-2012 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	increase 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 Optional	1989-2012 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 Optional	increase 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 Optional	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.	
2.4.14 Favourable reference population	a) Number of individuals/agreed exceptions/other units	206
	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 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 reported population in 2007 is within the range of the current population estimate.		

	b) Improved knowledge/more accurate data?	False
	The reported population in 2007 is within the range of the current population estimate.	
	c) Use of different method (e.g. "Range tool")?	False
	The reported population in 2007 is within the range of the current population estimate.	

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>There is thought to be a sufficient amount of habitat in the UK to support a viable population of the species.</p>	
2.5.2 Year or period	<p>2001-2012</p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>	
2.5.3 Method used Habitat for the species	<p>Absent data</p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>	
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	Judged to be able to exploit a range of other habitats, locally abundant, indicating reasonable condition of habitats available for this species
For further details of how the quality of habitat was assessed, see country audit trails.		
2.5.5 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>	
2.5.6 Short-term trend Trend direction	<p>stable</p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>	
2.5.7 Long-term trend Period	1989-2012	
	Optional For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	

2.5.8 Long-term trend Trend direction Optional	stable	
	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	
X: No threats or pressures	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	
X: No threats or pressures	L	

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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 increasing.

b) Qualifier**2.9.2 Population****a) Conclusion****Favourable**

Population has been assessed as Favourable because the population is greater than the FRV, even with the removal of non-native Welsh, Northern Irish and Scottish sites in this reporting round. The short term population trend is increasing.

b) Qualifier**2.9.3 Habitat for the species****a) Conclusion****Favourable**

Habitat has been assessed as Favourable because there is thought to be sufficient amount of habitat for the species to be viable, quality is moderate and the short term trend is stable.

b) Qualifier**2.9.4 Future prospects****a) Conclusion****Favourable**

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:

Range future prospects: Good

	<p>Population future prospects: Good</p> <p>Habitat future prospects: Good</p> <p>Overall future prospects: Good</p> <p>With planting and natural spread from cultivation of this species continuing, and no or very low collection risk, prospects are good.</p>				
	<table border="1"> <tr> <td>b) Qualifier</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	b) Qualifier			
b) Qualifier					
2.9.5 Overall assessment of Conservation Status	<p>Favourable</p> <p>Overall assessment is Favourable because all parameter assessments are Favourable.</p>				
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 Estimation of population size included in the SAC network	<table border="1"> <tr> <td>a) Unit</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>b) Minimum</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>c) Maximum</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	a) Unit				b) Minimum				c) Maximum			
	a) Unit												
	b) Minimum												
c) Maximum													
3.1.2 Method used													
3.1.3 Trend of population size within the network (short-term trend)													
Optional													

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

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