

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

Supporting documentation for the
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*)

IMPORTANT NOTE – PLEASE READ

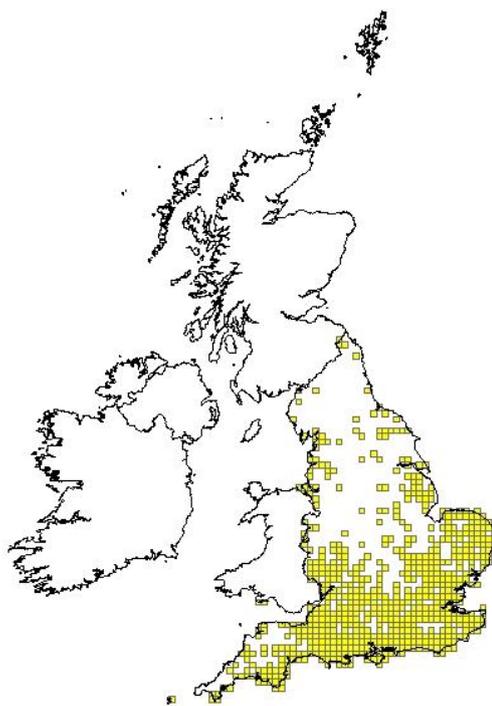
- The country-level reporting information contained in this document is a contribution to the Article 17 UK report for the habitat/species concerned.
- It has been provided by **Natural Resources Wales** and refers only to the state of the habitat/species in **Wales** - it does not constitute an assessment for the whole of the UK.
- The Article 17 UK Approach document provides details on how this information has been used and, combined with information supplied by other Statutory Nature Conservation Bodies
- The format of the document is closely aligned to that set out by the European Commission for Member State reporting – as a result, some of the fields are not applicable at a country-level and have deliberately been left blank – in addition, the content of most fields is constrained by the EC reporting categories.

As of 1 April 2013, the Countryside Council for Wales, Environment Agency Wales and Forestry Commission Wales became Natural Resources Wales/Cyfoeth Naturiol Cymru

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	Butcher's Broom

1.1 Maps			
1.1.1 Distribution map		Sensitive	False



1.1.2 Method used - map	Estimate based on partial data with some extrapolation and/or modelling There is some uncertainty over the exact native range of <i>Ruscus aculeatus</i> in Wales. Preston et al., 2002 only allow 2 native 10 km sq localities in Wales (SS48 & SS58) but sites in SS49 and SS87 are thought to be "possibly native" by specialists (Botanical Society of the British Isles Glamorganshire recorder; pers. Comm.). For this reason the report is an "estimate based on partial data".
1.1.3 Year or period	2001-2012 Data on native sites for <i>Ruscus aculeatus</i> are only collected infrequently,

	so the reporting period here is 2001-2012.
1.1.4 Additional distribution map	False
1.1.5 Range map	

2.1 Biogeographical region & marine regions	ATL
2.2 Published sources	<p>"bsbidb.org.uk</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>Wade, A.E., Kay, Q.O.N. & Ellis, R.G. (1994) Flora of Glamorgan. H.M.S.O."</p>

2.3 Range			
2.3.1 Surface area Range			
2.3.2 Method used Surface area of Range	<p>Estimate based on partial data with some extrapolation and/or modelling</p> <p>There is some uncertainty over the exact native range of <i>Ruscus aculeatus</i> in Wales. Preston et al., 2002 only allow 2 native 10 km sq localities in Wales (SS48 & SS58) but sites in SS49 and SS87 are thought to be "possibly native" by specialists (Botanical Society of the British Isles Glamorganshire recorder; pers. Comm.). This report only accepts the authoritative account of Preston et al but, for the reasons given above, it is also an "estimate based on partial data".</p>		
2.3.3 Short-term trend Period	Data on native sites for <i>Ruscus aculeatus</i> are only collected infrequently, so the reporting period here is 2001-2012.		
2.3.4 Short term trend Trend direction	The range trend is stable in Wales - although this appears to be a considerable decline, due to the exclusion of non-native occurrences (previously included in the last reporting round).		
2.3.5 Short-term trend Magnitude	<table border="1"> <tr> <td>a) Minimum</td> <td></td> </tr> </table> <p>The minimum percentage change is zero (at a 10km sq level), given the continued presence of this species in its only two unambiguously native sites.</p>	a) Minimum	
a) Minimum			

	b) Maximum	
	There is a possibility of an extension to the native range with a recently discovered population in SS49, near to the accepted native range and uncertainty over the status of populations in SS87. Neither populations have been definitively identified as native site, however, and should remain unassigned, pending further study. Additionally, these records, even if found to be native, would not represent an expansion of the species' range within the last reporting period.	
2.3.6 Long-term trend Period		
	There is no need for information from before 1989. Adequate data have been collected during this period.	
2.3.7 Long-term trend Trend direction		
	See note 2.3.4 above.	
2.3.8 Long-term trend Magnitude	a) Minimum	
Optional	See note 2.3.5a above.	
	b) Maximum	
	See note 2.3.5b above.	
2.3.9 Favourable reference range	a) Value in km²	
	b) Operator for FRR	
	c) FRR is unknown (indicated by "true")	False
	d) Method used to set FRR	
2.3.10 Reason for change	a) Genuine change?	False
Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to...	There is no evidence for genuine change, although the current range now only includes known native sites at SS48 and SS58, differing from the very extensive garden-escape records in previous reporting.	
	b) Improved knowledge/more accurate data?	True

	The apparent change between previous range estimates for this species is entirely due to a reassessment of the species' status. <i>Ruscus aculeatus</i> is now understood to be naturalised outside its native range and the majority of Welsh records are garden escapes or deliberately planted. The only unquestionably native populations are judged by recent specialists to be confined to south Gower. This reassessment is the result of improved knowledge and the report therefore notes this here.	
	c) Use of different method (e.g. "Range tool")?	False
	This difference in reporting does not result from a different "range tool" but is slightly different from the previous approach.	

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
	At a national scale the 10 km sq area represents the best scale of reporting for <i>Ruscus</i> population size. Presence or absence in these units defines the native distribution of this species for reporting in the Botanical Society of the British Isles atlas recording project.	
	b) Minimum	2
	The minimum population size in 10 km squares is 2 units, reflecting the distribution of this species in native sites in south Wales.	
	c) Maximum	2
	There are no other unambiguously native sites for <i>Ruscus aculeatus</i> elsewhere in Wales, although the species is very widely naturalised outside this range.	
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	
	See note 2.3.3 above.	

2.4.5 Method used Population size	Complete survey/Complete survey or a statistically robust estimate	
	The record of population size is based on independent botanical survey data from 10 km squares collected and validated by the Botanical Society of the British Isles. This represents a relatively thorough or complete survey of <i>Ruscus aculeatus</i> in the localities and habitat where it is known to be native.	
2.4.6 Short-term trend Period	2001-2012	
	See note 2.3.3 above.	
2.4.7 Short-term trend Trend direction	stable	
	There is no evidence of decline in the native <i>Ruscus aculeatus</i> populations of South Gower. The species is a long-lived component of steep, unmanaged coastal woodland, kept naturally open by drought and wind-pruning and protected by several site designations. In other situations the cultivated plant can spread into suitable habitat and the native population is under no significant threat.	
2.4.8 Short-term trend Magnitude	a) Minimum	0
	There is no change in 10 km sq distribution of native <i>R. aculeatus</i> in Wales over the short term.	
	b) Maximum	0
	See note 2.4.8a above.	
	c) Confidence interval	
	There is a high level of confidence in the 10 km sq trend data.	
2.4.9 Short-term trend Method used	Complete survey/Complete survey or a statistically robust estimate	
	See note 2.4.5.	
2.4.10 Long-term trend – Period	1989-2012	
	There are good, reliable data from 1989 within the native range for <i>Ruscus aculeatus</i> in Wales.	
2.4.11 Long-term trend Trend direction	stable	
	The long term trend in <i>Ruscus</i> populations, as measured by 10 km sq occupancy is stable - although current records appear to be much lower than in previous reporting rounds due to the emphasis here on native sites and decision to exclude garden escapes.	
2.4.12 Long-term trend Magnitude Optional	a) Minimum	0
	There is no evidence of change in <i>R. aculeatus</i> 10 km sq over the long term (but see note 2.4.11 above).	
	b) Maximum	0

	See note 2.4.12a above.	
	c) Confidence interval	
	There is a high level of confidence in this stable long term trend.	
2.4.13 Long term trend Method used	2	
	See note 2.4.5 above.	
2.4.14 Favourable reference population	a) Number of individuals/agreed exceptions/other units	
	b) Operator	
	c) FRP is unknown indicated by "true"	False
	d) Method used to set FRP	
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:	There is no genuine change in the population count for <i>Ruscus aculeatus</i> in Wales, although the overall range / 10 km sq abundance data is greatly reduced in this reporting round, since the report now only includes confirmed native sites and excludes garden escapes and plants found naturalised or deliberately introduced into the wider countryside.	
	b) Improved knowledge/more accurate data?	True
	The apparent change in this reporting round is due to more accurate data and a better understanding of the available range / records of <i>Ruscus aculeatus</i> outside its native range.	
	c) Use of different method (e.g. "Range tool")?	False
	The apparent change is not due to use of a different method.	

2.5 Habitat for the species	
2.5.1 Area estimation	0.5 The two areas of coastal woodland in Gower at Nicholaston and Oxwich cover approximately 0.5 km sq in extent. 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 See note 2.3.3 above.
2.5.3 Method used Habitat for the species	Estimate based on partial data with some extrapolation and/or modelling The extents of habitat are calculated on site boundaries digitised in 'Mapinfo', the Geographical Imaging System of the Countryside Council for Wales,. The habitat for <i>Ruscus aculeatus</i> has been fully surveyed for this species and the extents of its boundaries delineated as management units in the process of notifying Oxwich and Nicholaston Woods as Sites of Special Scientific Interest.
	2.5.4 Quality of the habitat a) Habitat quality Good The quality of habitat for <i>Ruscus aculeatus</i> has not been assessed in detail, although the plant is known to be widespread (although localised) within the defined woodland blocks. This indicates a good habitat for the species. b) Assessment method Ruscus aculeatus is known to be widespread, fruiting and locally abundant in its native sites. Taking the species as an indicator of habitat, then the habitat condition is judged to be 'Good'. There has been no specific study of the ecological requirements and habitat for <i>Ruscus aculeatus</i> in Wales but it is locally frequent and clearly regenerating. As an indicator of habitat it is in good condition.
2.5.5 Short-term trend Period	2001-2012 See note 2.3.3 above. See note 2.4.7 above.
	2.5.6 Short-term trend Trend direction stable
2.5.7 Long-term trend Period	1989-2012 See note 2.4.10 above
	2.5.8 Long-term trend Trend direction stable See note 2.4.11 above.
2.5.9 Area of suitable habitat for the species	a) Value in km² 0.5 See note 2.5.1 above
	b) Absence of data indicated as '0'
2.5.10 Reason for change Is the difference between the	a) Genuine change? False

value reported at 2.5.1 and the previous reporting round mainly due to	See note 2.4.15a above	
	b) Improved knowledge/more accurate data?	True
	See note 2.4.15b above.	
	c) Use of different method (e.g. "Range tool")?	False
See note 2.4.15c above.		

2.6 Main pressures		
a) Pressure	b) Ranking	c) Pollution qualifier
	H = high importance M = medium importance L = low importance	
X: No threats or pressures	L	

The population of *Ruscus aculeatus* appears to be locally abundant and regenerating naturally in its native south Wales sites. There are no serious / significant threats or pressures and certainly no commercial collecting. The species is widespread as a garden escape elsewhere in Wales.

2.6.1 Method used – Pressures	mainly based on expert judgement and other data Ruscus aculeatus is a very visible, long lived perennial species and not easily overlooked. It is frequently recorded in site visits by experienced botanists from the Botanical Society of the British Isles and readily assessed.
--------------------------------------	---

2.7 Threats		
a) Threat	b) Ranking	c) Pollution qualifier
	H = high importance M = medium importance L = low importance	
X: No threats or pressures	L	

See note 2.6 above

2.7.1 Method used – Threats	expert opinion See note 2.7.1 above.
------------------------------------	--

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*)

Please refer to the United Kingdom assessment for this species.

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	
	c) Maximum	
3.1.2 Method used		
3.1.3 Trend of population size within the network (short-term trend)		

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

--