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

Fourth Report by the United Kingdom under Article 17

on the implementation of the Directive
from January 2013 to December 2018

Supporting documentation for the conservation status assessment for the species:

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

WALES

IMPORTANT NOTE - PLEASE READ

- The information in this document is a country-level contribution to the UK Report on the conservation status of this species, submitted to the European Commission as part of the 2019 UK Reporting under Article 17 of the EU Habitats Directive.
- The 2019 Article 17 UK Approach document provides details on how this supporting information was used to produce the UK Report.
- The UK Report on the conservation status of this species is provided in a separate document.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Explanatory notes (where provided) by the country are included at the end. These provide an audit trail of relevant supporting information.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; (iii) the field was not relevant to this species (section 12 Natura 2000 coverage for Annex II species) and/or (iv) the field was only relevant at UK-level (sections 9 Future prospects and 10 Conclusions).
- For technical reasons, the country-level future trends for Range, Population and Habitat for the species are only available in a separate spreadsheet that contains all the country-level supporting information.
- The country-level reporting information for all habitats and species is also available in spreadsheet format.

Visit the JNCC website, https://jncc.gov.uk/article17, for further information on UK Article 17 reporting.

Report on the main results of the surveillance under Article 11 for Annex II, IV and V species (Annex B)

NATIONAL LEVEL

1. General information

1.1 Member State	**UK (Wales information only)**
1.2 Species code	**1849**
1.3 Species scientific name	**Ruscus aculeatus**
1.4 Alternative species scientific name	
1.5 Common name (in national language)	Butcher's broom

2. Maps

2.1 Sensitive species	No
2.2 Year or period	2012-2017
2.3 Distribution map	Yes
2.4 Distribution map Method used	Based mainly on extrapolation from a limited amount of data
2.5 Additional maps	No

3. Information related to Annex V Species (Art. 14)

3.1 Is the species taken in the wild/exploited?	No	
3.2 Which of the measures in Art. 14 have been taken?	a) regulations regarding access to property	No
	b) temporary or local prohibition of the taking of specimens in the wild and exploitation	No
	c) regulation of the periods and/or methods of taking specimens	No
	d) application of hunting and fishing rules which take account of the conservation of such populations	No
	e) establishment of a system of licences for taking specimens or of quotas	No
	f) regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens	No
	g) breeding in captivity of animal species as well as artificial propagation of plant species	No
	h) other measures	No

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3.3 Hunting bag or quantity taken in the wild for Mammals and Acipenseridae (Fish)

a) Unit

b) Statistics/ quantity taken	Provide statistics/quantity per hunting season or per year (where season is not used) over the reporting period					
	Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
Min. (raw, ie. not rounded)						
Max. (raw, ie. not rounded)						
Unknown	No	No	No	No	No	No

3.4. Hunting bag or quantity taken in the wild Method used

3.5. Additional information

BIOGEOGRAPHICAL LEVEL

4. Biogeographical and marine regions

4.1 Biogeographical or marine region where the species occurs

Atlantic (ATL)

4.2 Sources of information

Botanical Society of Britain & Ireland distribution database, https://database.bsbi.org/

Joint Nature Conservation Committee. 2007. Second Report by the UK under Article 17 on the implementation of the Habitats Directive from January 2001 to December 2006. Peterborough: JNCC. Available from: www.jncc.gov.uk/article17. [Accessed 25th May 2018]

NRW, 2013. Supporting documentation for the Third Report by the United Kingdom under Article 17 for Wales: . JNCC. Available from: http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H8110_WALES.pdf [Accessed 25th May 2018]

Preston, C.D., Pearman, D.A. & Dines, T.D. 2002. New Atlas of the British and Irish Flora. Oxford University Press.

Stewart.B, Woodman. J.P. 2017. Glamorgan Rare Plant Register, Unpublished. BSBI

Wade, A.E., Kay, Q.O.N. & Ellis, R.G. 1994. Flora of Glamorgan. H.M.S.O.

5. Range

5.1 Surface area (km²)

5.2 Short-term trend Period

5.3 Short-term trend Direction

Stable (0)

5.4 Short-term trend Magnitude

a) Minimum

b) Maximum

5.5 Short-term trend Method used

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5.6 Long-term trend Period		
5.7 Long-term trend Direction		
5.8 Long-term trend Magnitude	a) Minimum	b) Maximum
5.9 Long-term trend Method used		
5.10 Favourable reference range	a) Area (km²) b) Operator c) Unknown d) Method	
5.11 Change and reason for change in surface area of range	No change The change is mainly due to:	
5.12 Additional information		

6. Population

6.1 Year or period	2008-2017	
6.2 Population size (in reporting unit)	a) Unit	number of map 1x1 km grid cells (grids1x1)
	b) Minimum	
	c) Maximum	
	d) Best single value	11
6.3 Type of estimate	Best estimate	
6.4 Additional population size (using population unit other than reporting unit)	a) Unit	number of map 10x10 km grid cells (grids10x10)
	b) Minimum	
	c) Maximum	
	d) Best single value	2
6.5 Type of estimate	Best estimate	
6.6 Population size Method used	Complete survey or a statistically robust estimate	
6.7 Short-term trend Period	2007-2017	
6.8 Short-term trend Direction	Stable (0)	
6.9 Short-term trend Magnitude	a) Minimum b) Maximum c) Confidence interval	
6.10 Short-term trend Method used	Complete survey or a statistically robust estimate	
6.11 Long-term trend Period	1989-2017	
6.12 Long-term trend Direction	Stable (0)	
6.13 Long-term trend Magnitude	a) Minimum b) Maximum c) Confidence interval	
6.14 Long-term trend Method used	Complete survey or a statistically robust estimate	

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6.15 Favourable reference population (using the unit in 6.2 or 6.4)	a) Population size b) Operator c) Unknown d) Method
6.16 Change and reason for change in population size	No change The change is mainly due to:
6.17 Additional information	

7. Habitat for the species

7.1 Sufficiency of area and quality of occupied habitat	a) Are area and quality of occupied habitat sufficient (to maintain the species at FCS)?	Yes
	b) Is there a sufficiently large area of occupied AND unoccupied habitat of suitable quality (to maintain the species at FCS)?	
7.2 Sufficiency of area and quality of occupied habitat Method used	Based mainly on extrapolation from a limited amount of data	
7.3 Short-term trend Period	2008-2017	
7.4 Short-term trend Direction	Stable (0)	
7.5 Short-term trend Method used	Based mainly on expert opinion with very limited data	
7.6 Long-term trend Period		
7.7 Long-term trend Direction		
7.8 Long-term trend Method used		
7.9 Additional information		

8. Main pressures and threats

8.1 Characterisation of pressures/threats

Pressure	Ranking
No pressures (Xxp)	

Threat	Ranking
No threats (Xxt)	

8.2 Sources of information	
8.3 Additional information	

9. Conservation measures

9.1 Status of measures	a) Are measures needed?	No
	b) Indicate the status of measures	
9.2 Main purpose of the measures taken		
9.3 Location of the measures taken		

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9.4 Response to the measures

9.5 List of main conservation measures

9.6 Additional information

10. Future prospects

10.1 Future prospects of parameters

a) Range
b) Population
c) Habitat of the species

10.2 Additional information

11. Conclusions

11.1. Range

11.2. Population

11.3. Habitat for the species

11.4. Future prospects

11.5 Overall assessment of Conservation Status

11.6 Overall trend in Conservation Status

11.7 Change and reasons for change in conservation status and conservation status trend

a) Overall assessment of conservation status

No change

The change is mainly due to:

b) Overall trend in conservation status

No change

The change is mainly due to:

11.8 Additional information

12. Natura 2000 (pSCIs, SCIs and SACs) coverage for Annex II species

12.1 Population size inside the pSCIs, SCIs and SACs network (on the biogeographical/marine level including all sites where the species is present)

a) Unit
b) Minimum
c) Maximum
d) Best single value

12.2 Type of estimate

12.3 Population size inside the network Method used

12.4 Short-term trend of population size within the network Direction

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12.5 Short-term trend of population size within the network Method used

12.6 Additional information

13. Complementary information

13.1 Justification of % thresholds for trends

13.2 Trans-boundary assessment

13.3 Other relevant Information

Distribution Map

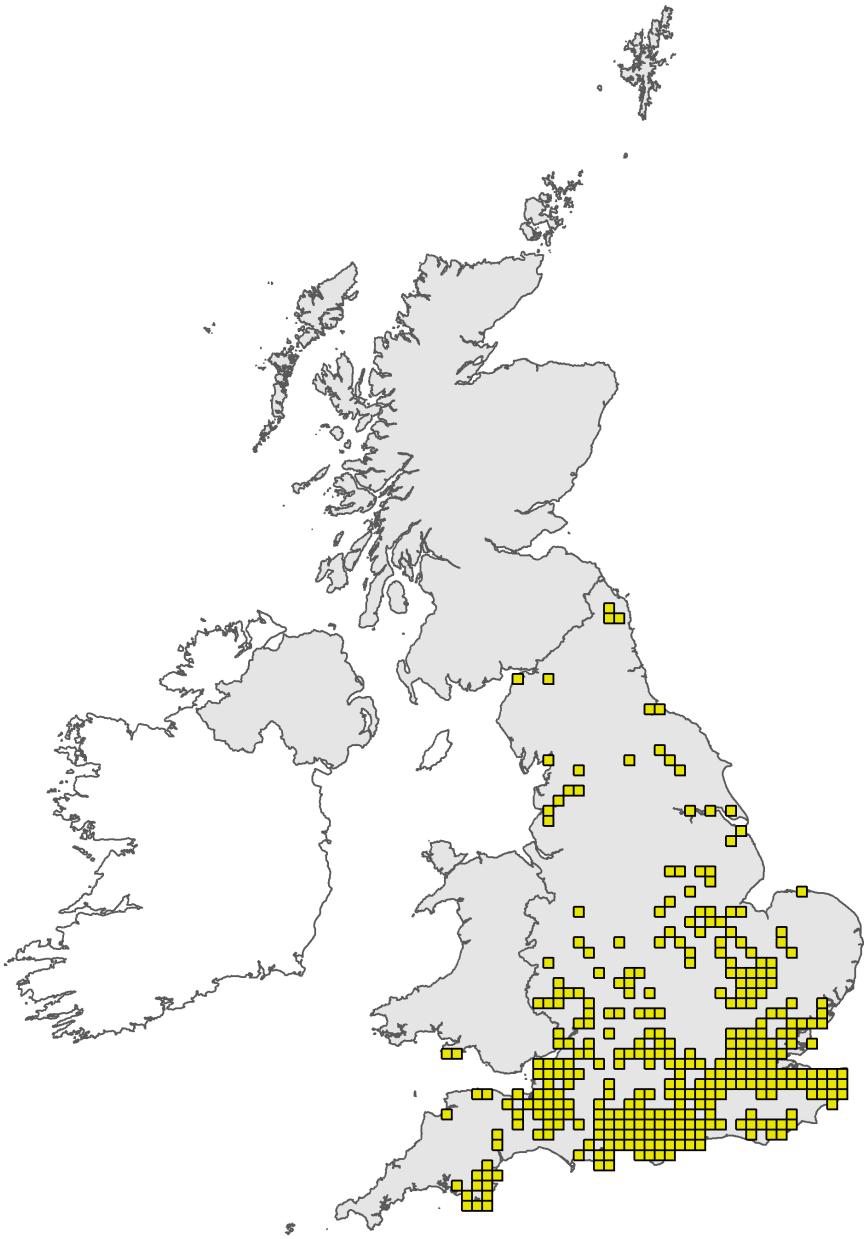

Figure 1: UK distribution map for S1849 - Butcher's broom (*Ruscus aculeatus*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The 10km grid square distribution map is based on available species records within the current reporting period. For further details see the 2019 Article 17 UK Approach document.

Range Map

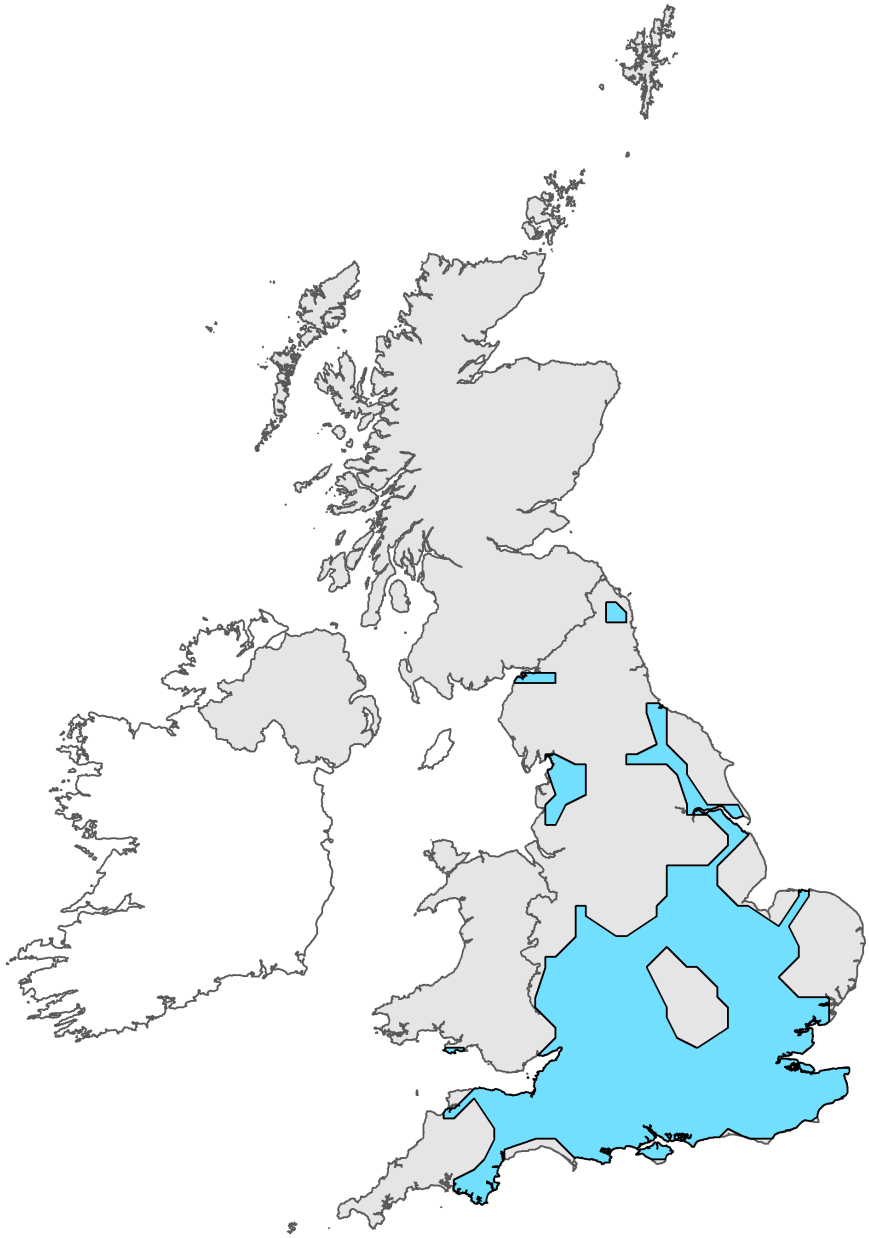

Figure 2: UK range map for S1849 - Butcher's broom (*Ruscus aculeatus*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The range map has been produced by applying a bespoke range mapping tool for Article 17 reporting (produced by JNCC) to the 10km grid square distribution map presented in Figure 1. The alpha value for this species was 20km. For further details see the 2019 Article 17 UK Approach document.

Explanatory Notes

Species name: Ruscus aculeatus (1849)

Field label	Note
2.4 Distribution map; Method used	There is some uncertainty over the exact native range of Ruscus aculeatus in Wales. Preston et al., 2002 only allow 2 native 10 km sq localities in Wales (SS48 & SS58).

Species name: Ruscus aculeatus (1849) Region code: ATL

Field label	Note
5.3 Short term trend; Direction	See 5.11
5.11 Change and reason for change in surface area of range	There has been no change in the reported native distribution of Ruscus in Wales between the 2007-12 and 2013-18 reporting periods.
6.2 Population size	Ruscus is considered to be native in just two 10 km squares in Wales. Populations have been reported from 11 monads (1 km squares) within this native distribution, with the most recent record for each square dating from between 2008 and 2017 (BSBI database. Stewart. B, 2017).
6.4 Additional population size	The minimum population size in 10 km squares is 2 units, reflecting the distribution of this species in native sites in south Wales. There are no other unambiguously native sites for Ruscus aculeatus elsewhere in Wales, although the species is very widely naturalised outside this range.
6.8 Short term trend; Direction	There is no evidence of decline in the native Ruscus aculeatus 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.
6.10 Short term trend; Method used	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 Ruscus aculeatus in the localities and habitat where it is known to be native.
6.11 Long term trend; Period	There are good, reliable data from 1989 within the native range for Ruscus aculeatus in Wales.
6.12 Long term trend; Direction	The long-term trend in Ruscus populations, as measured by 10 km sq occupancy is stable.
6.14 Long term trend; Method used	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 Ruscus aculeatus in the localities and habitat where it is known to be native (BSBI database. Stewart. B 2017).
6.16 Change and reason for change in population size	There has been no change in the 10 km square population count for Ruscus aculeatus in Wales between the two reports. The apparently significant drop in both distribution/range and population between the 2007 report (JNCC 2007) and the 2013 reports (NRW 2013) reflected a change in the methodology used to assess the two parameters rather than an actual change in either. The change stems from a decision in 2013 (and repeated here) to only include confirmed native sites for the species and exclude garden escapes and plants found naturalised or deliberately introduced into the wider countryside.

7.1 Sufficiency of area and quality of occupied habitat	- area = sufficient -quality = sufficient Overall = sufficient Native populations of Ruscus aculeatus in Wales are confined to two areas of coastal woodland in Gower at Nicholaston and Oxwich and cover approximately 0.5 km sq in extent. The quality of habitat 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.
7.2 Sufficiency of area and quality of occupied habitat; Method used	The typical Woodland / woodland edge habitat on limestone for Ruscus aculeatus 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. 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'.
7.3 Short term trend; Period	There is no evidence of decline in the native Ruscus aculeatus populations of South Gower (BSBI database, Stewart. B 2017). 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.
8.1 Characterisation of pressures/ threats	Xxp. 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 and on Gower. There are situations where it is difficult to ascertain the origins of the population, native, accidental colonisation or deliberate introduction. Threats: Xxt. The population of Ruscus aculeatus appears to be locally abundant and regenerating naturally in its native south Wales sites.
10.1 Future prospects of parameters	Ruscus appears to be secure at its native sites in south Wales and in the absence of significant threats there is no reason to suspect that its populations will not remain so in the medium-term. The native sites for Ruscus are almost entirely confined to the protected sites series in south Wales, where the habitat for the species is considered to be secure. In the absence of significant threats there is no reason to suspect that the habitat will not remain in a suitable condition for the species for at least the medium-term