

**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:

S1441 - Shore dock (*Rumex rupestris*)

## 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>	
<b>0.2 Species</b>	<b>0.2.1 Species code</b>	<b>S1441</b>
	<b>0.2.2 Species scientific name</b>	<b><i>Rumex rupestris</i></b>
	<b>0.2.3 Alternative species scientific name</b> Optional	
	<b>0.2.4 Common name</b> Optional	

<b>1.1 Maps</b>			
<b>1.1.1 Distribution map</b>	<b>True</b>	<b>Sensitive</b>	<b>False</b>
	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.		



<b>1.1.2 Method used - map</b>	<b>Complete survey/Complete survey or a statistically robust estimate</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
<b>1.1.3 Year or period</b>	<b>2001-2012</b>
	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.

<b>1.1.4 Additional distribution map</b> Optional	<b>False</b>
<b>1.1.5 Range map</b>	<b>True</b> 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.



<b>2.1 Biogeographical region &amp; marine regions</b>	<b>ATL</b>
<b>2.2 Published sources</b>	<p><b>BIORET, F. &amp; DANIELS, R. (2005). Assessments of threats to populations of <i>Rumex rupestris</i> Le Gall (Shore Dock) in Britain and France, in LEACH S. J., PAGE, C. N., PEYTOUREAU, Y. &amp; SANDFORD, M. N. eds. Botanical Links in the Atlantic Arc, pp. 201-209. Botanical Society of the British Isles, London.</b></p> <p><b>Bonner, I.R. (2007) Anglesey Rare Plant Register (revised edition). Botanical Society of the British Isles. Bsbidb.org</b></p> <p><b>BSBI tetrad maps</b> <a href="http://www.bsbimaps.org.uk/mstetrads/showmap.php?spid=1752.0&amp;spname=Rumex%20rupestris&amp;commname=Shore%20Dock&amp;countback=0">http://www.bsbimaps.org.uk/mstetrads/showmap.php?spid=1752.0&amp;spname=Rumex%20rupestris&amp;commname=Shore%20Dock&amp;countback=0</a></p> <p><b>Creer, J. (2005) Abermenai - Aberffraw SAC. <i>R. rupestris</i> monitoring. (Countryside Council for Wales. Bangor.)</b></p> <p><b>Creer, J. (2012) in prep. Abermenai - Aberffraw SAC. <i>R. rupestris</i> monitoring. (Countryside Council for Wales. Bangor.)</b></p> <p><b>DANIELS, R. E. &amp; MOY, I. L. (1998). Species Recovery Programme - Shore Dock (<i>Rumex rupestris</i> Le Gall). Second report. Report to English nature, Species Recovery Programme.</b></p> <p><b>Evans, S.B. (2001) <i>Rumex rupestris</i> survey work in</b></p>

	<p>Pembrokeshire 2001. A brief report by S.B.Evans. (Unpublished report to Countryside Council for Wales. B.S.B.I.)</p> <p>Evans, S.B. (2012) <i>Rumex rupestris</i> survey work in Pembrokeshire 2011. A brief report by S.B.Evans. (Unpublished report to Countryside Council for Wales. B.S.B.I.)</p> <p>Jones, R.A. (1993) Shore dock (<i>Rumex rupestris</i>). Monitoring report. Countryside Council for Wales.</p> <p>Kay, Q.O.N. Draft Biological Flora of the British Isles: <i>Rumex rupestris</i> Le Gall. (Unpublished report submitted to the <i>Rumex rupestris</i> UKBAP Steering Group).</p> <p>KING, M. P. (1989). An investigation into the current status and ecology of the shore dock <i>Rumex rupestris</i> in Devon and Cornwall. M. Sc. Thesis, University College, London</p> <p>KING, M. P. (2002). Shore Dock <i>Rumex rupestris</i> in 2001. Plantlife Report No. 196</p> <p>KING, M. P. (2003-2004). Species Dossier for <i>Rumex rupestris</i> Le Gall. Plantlife.  <a href="http://www.plantlife.org.uk/downloads/species_dossier/Rumex_rupestris_dossier">Http://www.plantlife.org.uk/downloads/species_dossier/Rumex_rupestris_dossier</a></p> <p>KING, M. P., MCDONNELL, E. J., LEACH, S. J. &amp; WIGGINGTON, M. J. (1999). <i>Rumex rupestris</i> le Gall, in WIGGINGTON, M. J. Ed. British Red Data Books. 1. Vascular Plants, pp 320-321. JNCC, Peterborough</p> <p>LEACH S.J., MCDONNELL, E.J., PARKER S.J., and REAY P. J. 2009. <i>Rumex rupestris</i> Le Gall at Soar Mill Cove, S. Devon. BSBI News 110: 27-29</p> <p>McDONNELL, E.J. &amp; KING, M.P. (2000). <i>Rumex rupestris</i> (Shore Dock). Report on fieldwork undertaken in 1999. Plantlife Report No. 140.</p> <p>McDonnell, E.J. &amp; King, M.P. (2006) <i>Rumex rupestris</i> Le Gall (Shore Dock) in SW England: review of recent surveys and assessment of current status. (In: Leach, S.J., Page, C.N. Peytoureau, Y. &amp; Sandford, M.N. eds. Botanical Links in the Atlantic Arc, pp. 201-209. BSBI, London.)</p> <p>McDONNELL, E.J. (1995). The status of shore dock (<i>Rumex rupestris</i> Le Gall) in Britain in 1994. Report to English Nature, Species Recovery programme.</p> <p>McDONNELL, E.J. (1998). <i>Rumex rupestris</i> (Shore Dock). Report on fieldwork. Plantlife report No. 101.</p> <p>McDONNELL, E.J. (1999). <i>Rumex rupestris</i> (Shore Dock). Report on 1998 fieldwork. Plantlife report No. 128.</p> <p>PARSLOW, R. &amp; COLSTON, A. (1994). The current status of <i>Rumex rupestris</i> Le Gall in the Isles of Scilly. Report to English Nature, Species Recovery Programme.</p> <p>PARSLOW, R. (1996). Shore Dock <i>Rumex rupestris</i> Le Gall in the Isles of Scilly. Report to English nature, Species Recovery programme.</p> <p>Wilkinson, K. (2008) Dunraven Bay SAC. <i>Rumex rupestris</i> (1441) SAC Monitoring report Draft. (Unpublished report to Countryside Council for Wales).</p> <p>UK distribution map data sources</p> <p><b>BSBI BSBI:VPDB: Atlas2000 records on disc via Trevor Dines</b>  <b>BSBI MAPMATE database (includes import from several data centres)</b>  <b>BSBI Vascular Plant Database. Atlas2000 - updated records</b></p>
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	<p><b>from December 1995 onwards. Sent to JNCC 18/7/2012</b>  <b>BSBI: Murphy, R.J. (1990-2006) 2006 Sent to JNCC 18/7/2012</b>  <b>BSBI: Watsonia 23 (1999-2001) 2001; Biological Records Centre (1970-2008) 2008 Sent to JNCC 18/7/2012</b>  <b>BSBI: Vascular Plant Database, Plants1910 Proceedings of the Royal Society of Edinburgh 30:65-181 Sent to JNCC 18/7/2012</b>  <b>Emailed to JNCC (LH) 11th Oct 2012 by John Martin (NE) (gathered by Simon Leach)</b>  <b>Plantlife records 2008 Emailed to JNCC (DC) by TH 18/07/2012</b></p> <p>UK Distribution Map data sources</p> <p>BSBI BSBI:VPDB: Atlas2000 records on disc via Trevor Dines  BSBI MAPMATE database (includes import from several data centres)  BSBI Vascular Plant Database. Atlas2000 - updated records from December 1995 onwards. Sent to JNCC 18/7/2012  BSBI: Murphy, R.J. (1990-2006) 2006 Sent to JNCC 18/7/2012  BSBI: Watsonia 23 (1999-2001) 2001; Biological Records Centre (1970-2008) 2008 Sent to JNCC 18/7/2012  BSBI: Vascular Plant Database, Plants1910 Proceedings of the Royal Society of Edinburgh 30:65-181 Sent to JNCC 18/7/2012  Emailed to JNCC (LH) 11th Oct 2012 by John Martin (NE) (gathered by Simon Leach)  Plantlife records 2008 Emailed to JNCC (DC) by TH 18/07/2012</p>
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<b>2.3 Range</b>	
<b>2.3.1 Surface area Range</b>	<p><b>1868</b></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>
<b>2.3.2 Method used Surface area of Range</b>	<p><b>Complete survey/ Complete survey or a statistically robust estimate</b></p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>
<b>2.3.3 Short-term trend Period</b>	<p><b>2001-2012</b></p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>
<b>2.3.4 Short term trend Trend direction</b>	<p><b>stable</b></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. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>
<b>2.3.5 Short-term trend Magnitude</b>	<p><b>a) Minimum</b></p>

Optional		
	<b>b) Maximum</b>	
<b>2.3.6 Long-term trend Period</b>		
Optional		
<b>2.3.7 Long-term trend Trend direction</b>		
Optional		
<b>2.3.8 Long-term trend Magnitude</b>	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
<b>2.3.9 Favourable reference range</b>	<b>a) Value in km<sup>2</sup></b>	
	<b>b) Operator for FRR</b>	<b>approximately equal to</b>
	<b>c) FRR is unknown (indicated by "true")</b>	<b>False</b>
	<b>d) Method used to set FRR</b>	
<b>2.3.10 Reason for change</b> Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to...	<b>a) Genuine change?</b>	<b>False</b>
	The increase in range is not thought to be genuine but is mostly due to better data.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>True</b>
	The increase in range is not thought to be genuine but is mostly due to better data.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>

	The increase in range is not thought to be genuine but is mostly due to better data.
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<b>2.4 Population</b>		
<b>2.4.1 Population size estimation</b> (using individuals or agreed exceptions where possible)	<b>a) Unit</b>	<b>number of individuals</b>
	The population unit is the same as reported in 2007.	
	<b>b) Minimum</b>	<b>665</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>c) Maximum</b>	<b>1251</b>
For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.		
<b>2.4.2 Population size estimation</b> (using population unit other than individuals) Optional ( <i>if 2.4.1 filled in</i> )	<b>a) Unit</b>	
	<b>b) Minimum</b>	
	<b>c) Maximum</b>	
<b>2.4.3 Additional information on population estimates / conversion</b> Optional	<b>a) Definition of "locality"</b>	
	<b>b) Method to convert data</b>	
	<b>c) Problems encountered to provide population size estimation</b>	<b>In some cases it is not clear what constitutes and individual plant. Clumps are counted as individuals even though they might not always be the same genet. The number of plants fluctuates greatly.</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.4 Year or period</b>	<b>2005-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.5 Method used Population size</b>	<b>Complete survey/ Complete survey or a statistically robust estimate</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.6 Short-term trend Period</b>	<b>1998-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.7 Short-term trend Trend direction</b>	<b>increase</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	

<b>2.4.8 Short-term trend Magnitude</b> Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
	<b>c) Confidence interval</b>	
<b>2.4.9 Short-term trend Method used</b>	<b>Complete survey/Complete survey or a statistically robust estimate</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.10 Long-term trend – Period</b> Optional	<b>1989-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.11 Long-term trend Trend direction</b> Optional	<b>stable</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.12 Long-term trend Magnitude</b> Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
	<b>c) Confidence interval</b>	
<b>2.4.13 Long term trend Method used</b> Optional	<b>Estimate based on partial data with some extrapolation and/or modelling</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.14 Favourable reference population</b>	<b>a) Number of individuals/agreed exceptions/other units</b>	<b>350</b>
	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>b) Operator</b>	
	<b>c) FRP is unknown (indicated by "true")</b>	<b>False</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>d) Method used to set FRP</b>	<b>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>
	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>2.4.15 Reason for change</b>		
Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	<b>a) Genuine change?</b>	<b>True</b>
	The increase in population is thought to be partly the result of genuine change and partly improved data.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>True</b>
	The increase in population is thought to be partly the result of genuine change and partly improved data.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
	The increase in population is thought to be partly the result of genuine change and partly improved data.	

## 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.	
	There is thought to be a sufficient amount of habitat in the UK to support a viable population of the species.	
<b>2.5.2 Year or period</b>	<b>2007-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.3 Method used Habitat for the species</b>	<b>Absent data</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.4 Quality of the habitat</b>	<b>a) Habitat quality</b>	<b>Moderate</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>b) Assessment method</b>	<b>Quality of habitat has been assessed through integrated site assessments of protected sites and other specific monitoring of the habitat.</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.5 Short-term trend Period</b>	<b>2001-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.6 Short-term trend Trend direction</b>	<b>decrease</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.7 Long-term trend Period</b>	<b>1989-2012</b>	
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.8 Long-term trend Trend direction</b>	<b>unknown</b>	
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.9 Area of suitable habitat for the species</b>	<b>a) Value in km<sup>2</sup></b>	
	<b>b) Absence of data indicated as '0'</b>	
<b>2.5.10 Reason for change</b> Is the difference between the value reported at 2.5.1 and the previous reporting round mainly due to	<b>a) Genuine change?</b>	<b>False</b>
	Surface area of habitat is unknown so no comparison is possible.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	Surface area of habitat is unknown so no comparison is possible.	
	<b>c) Use of different method (e.g.</b>	<b>False</b>

	<b>"Range tool"?)</b>	
	Surface area of habitat is unknown so no comparison is possible.	

<b>2.6 Main pressures</b>		
<b>a) Pressure</b>	<b>b) Ranking</b>	<b>c) Pollution qualifier</b>
	H = high importance (max 5 entries) M = medium importance L = low importance	
L05: collapse of terrain, landslide	M	
A04: grazing	L	
B01: forest planting on open ground	L	
B02: Forest and Plantation management & use	L	
G05: Other human intrusions and disturbances	L	
H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	L	NP
H02: Pollution to groundwater (point sources and diffuse sources)	L	NP
J02: human induced changes in hydraulic conditions	L	
J03: Other ecosystem modifications	L	
K01: abiotic (slow) natural processes	L	
K02: Biocenotic evolution, succession	L	
L07: storm, cyclone	L	
M01: Changes in abiotic conditions	L	

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

**2.6.1 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.

<b>2.7 Threats</b>		
<b>a) Threat</b>	<b>b) Ranking</b>	<b>c) Pollution qualifier</b>
	H = high importance (max 5 entries) M = medium importance L = low importance	

J02: human induced changes in hydraulic conditions	M	
J03: Other ecosystem modifications	M	
L05: collapse of terrain, landslide	M	
A04: grazing	L	
B01: forest planting on open ground	L	
B02: Forest and Plantation management & use	L	
D03: shipping lanes, ports, marine constructions	L	
G05: Other human intrusions and disturbances	L	
H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	L	
H02: Pollution to groundwater (point sources and diffuse sources)	L	
K01: abiotic (slow) natural processes	L	
K02: Biocenotic evolution, succession	L	
L07: storm, cyclone	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**

<b>2.8.2 Other relevant information</b>	
<b>2.8.3 Trans-boundary assessment</b>	

<b>2.9 Conclusions (<i>assessment of conservation status at end of reporting period</i>)</b>	
<b>2.9.1 Range</b>	<b>a) Conclusion</b> <b>Favourable</b>
	Range has been assessed as Favourable because range is approximately equal to the FRV and the short term range trend is stable.
	<b>b) Qualifier</b>
<b>2.9.2 Population</b>	<b>a) Conclusion</b> <b>Favourable</b>
	Population has been assessed as Favourable because the population is greater than the FRV, and the short term trend is increasing.
	<b>b) Qualifier</b>
<b>2.9.3 Habitat for the species</b>	<b>a) Conclusion</b> <b>Inadequate</b>
	Habitat has been assessed as Inadequate, as quality is judged to be moderate, habitat extent judged to be able to support the population but the short term trend is declining.
	<b>b) Qualifier</b> <b>declining</b>
<b>2.9.4 Future prospects</b>	<b>a) Conclusion</b> <b>Favourable</b>
	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 Population future prospects: Good Habitat future prospects: Good Overall future prospects: Good  Main threats / pressures are unlikely to severely impact the populations, and much of current populations are inside designated sites.
	<b>b) Qualifier</b>
<b>2.9.5 Overall assessment of Conservation Status</b>	<b>Inadequate</b>

	Overall assessment is Inadequate because habitat has been assessed as Inadequate.
<b>2.9.6 Overall trend in Conservation Status</b>	<b>stable</b>
	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)

<b>3.1 Population</b>		
<b>3.1.1 Population size</b>  Estimation of population size included in the SAC network	<b>a) Unit</b>	<b>number of individuals</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>b) Minimum</b>	<b>613</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>c) Maximum</b>	<b>1025</b>
For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.		
<b>3.1.2 Method used</b>	<b>Complete survey/Complete survey or a statistically robust estimate</b>	
For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.		
<b>3.1.3 Trend of population size within the network</b> (short-term trend)  Optional	<b>increase</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	

<b>3.2 Conservation measures</b>				
Conservation measures taken (i.e. already being implemented) within the reporting period and provided information about their importance, location and evaluation.				
<b>3.2.1 Measure</b>	<b>3.2.2 Type</b>	<b>3.2.3 Ranking</b>	<b>3.2.4 Location</b>	<b>3.2.5 Broad evaluation of the measure</b>
		H = high importance	where the measure is PRIMARILY applied	

	a) Legal/statutory	b) Administrative	c) Contractual	d) Recurrent	e) One-off	M = medium importance L = low importance	a) Inside	b) Outside	c) Both inside & outside	a) Maintain	b) Enhance	c) Long term	d) No effect	e) Unknown	f) Not evaluated
1.2: Measures needed, but not implemented				Y		L	Y				Y				
2.1: Maintaining grasslands and other open habitats	Y	Y				L		Y						Y	
3.2: Adapt forest management				Y		L	Y				Y				
4.4: Restoring coastal areas				Y		L	Y				Y				
6.1: Establish protected areas/sites	Y					M			Y		Y	Y			
6.3: Legal protection of habitats and species	Y	Y				H			Y		Y	Y			

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