

**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:

S1079 - Violet click beetle (*Limoniscus violaceus*)

## 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>S1079</b>
	<b>0.2.2 Species scientific name</b>	<i>Limoniscus violaceus</i>
	<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>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>1.1.3 Year or period</b>	<b>1989-2002</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 by applying the UK range mapping 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>Forestry.gov.uk (2012) Chalara dieback of ash (<i>Chalara fraxinea</i>), <a href="http://www.forestry.gov.uk/ashdieback">http://www.forestry.gov.uk/ashdieback</a> (assessed 20 August 2012).</b></p> <p><b>Gouix, N, Brustel H (2012) Emergence trap, a new method to survey <i>Limoniscus violaceus</i> (Coleoptera:Elateridae) from hollow trees, <i>Biodivers. Conserv</i>, 21: 421-436</b></p> <p><b><a href="http://www.ptes.org/files/1578_paul_whitehead_limoniscus.pdf">http://www.ptes.org/files/1578_paul_whitehead_limoniscus.pdf</a></b></p> <p><b>Jansson, N. (2009). Habitat requirements and preservation of the beetle assemblages associated with hollow oaks. Doctoral thesis. Department of Physics, Chemistry and Biology, Division of Ecology, L inköping University, Linköping, Sweden.</b></p> <p><b>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: <a href="http://www.jncc.gov.uk/article17">www.jncc.gov.uk/article17</a></b></p>

	<p><b>Quine, C, et al, (2011) National Ecosystem Assessments, Chapter 8 Woodlands, 8.2.2 Stand Age &amp; Structural states, p247.</b></p> <p><b>Whitehead P. F., 2003, Current knowledge of the violet click beetle <i>Limoniscus violaceus</i> (P.W. J. Müller, 1821) (Col., Elateridae) in Britain. Proceedings of the second pan-European conference on Saproxyllic Beetles, PTES. UK distribution map data sources</b></p> <p><b>NBN Gateway data: Thames Valley Environmental Records Centre GA001120Extracted by LH 19/09/2012 English Nature Berkshire SSSI Records</b></p> <p><b>NBN Gateway data: Worcestershire Biological Records Centre GA000636Extracted by LH 19/09/2012 Natural England species data for SSSI within Worcestershire from date of notification to present</b></p> <p><b>NBN Gateway data: Worcestershire Biological Records Centre GA000777Extracted by LH 19/09/2012 WBRC Species data for Worcestershire collated by species group</b></p> <p>UK Distribution Map data sources</p> <p>NBN Gateway data: Thames Valley Environmental Records Centre GA001120Extracted by LH 19/09/2012 English Nature Berkshire SSSI Records</p> <p>NBN Gateway data: Worcestershire Biological Records Centre GA000636Extracted by LH 19/09/2012 Natural England species data for SSSI within Worcestershire from date of notification to present</p> <p>NBN Gateway data: Worcestershire Biological Records Centre GA000777Extracted by LH 19/09/2012 WBRC Species data for Worcestershire collated by species group</p>
--	---

<b>2.3 Range</b>	
<b>2.3.1 Surface area Range</b>	<b>300</b> 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.
<b>2.3.2 Method used Surface area of Range</b>	<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>2.3.3 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>2.3.4 Short term trend</b>	<b>stable</b>

<b>Trend direction</b>	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.	
<b>2.3.5 Short-term trend Magnitude</b> Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
<b>2.3.6 Long-term trend Period</b> Optional	<b>1991-2012</b> For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
<b>2.3.7 Long-term trend Trend direction</b> Optional	<b>stable</b> 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.	
<b>2.3.8 Long-term trend Magnitude</b> Optional	<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>300</b>
	The FRV for range is the same as reported in 2007. For further details see the 2013 Article 17 UK Approach document.	
	<b>b) Operator for FRR</b>	
	<b>c) FRR is unknown (indicated by "true")</b>	<b>False</b>
	<b>d) Method used to set FRR</b>	<b>The FRV for range is the same as reported in 2007. 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</b>

		<b>17 UK Approach document.</b>
	The FRV for range is the same as reported in 2007. 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.	
<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 current range figure is the same as reported in 2007.	
	<b>b) Improved knowledge/ more accurate data?</b>	<b>False</b>
	The current range figure is the same as reported in 2007.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
		The current range figure is the same as reported in 2007.

<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 inhabited trees</b>
	<b>b) Minimum</b>	<b>19</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
	<b>c) Maximum</b>	<b>19</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>number of map 1x1 km grid cells</b>
	<b>b) Minimum</b>	<b>7</b>
	This species is found in 7 1km grid squares spread over 3 sites. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
	<b>c) Maximum</b>	<b>7</b>
	This species is found in 7 1km grid squares spread over 3 sites. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
<b>2.4.3 Additional information on population estimates / conversion</b> Optional	<b>a) Definition of "locality"</b>	
	<b>b) Method to</b>	

	<b>convert data</b>	
	<b>c) Problems encountered to provide population size estimation</b>	<b>Attempts at establishing a chemical detection method for larvae (PTES-Royal Holloway College) was unsuccessful in not being able to secure any experimental subjects, though the techniques have been shown to work on other taxa. Direct larval searching is considered to be damaging and has not been repeated. This leaves only a tree resource measure of any population level trend assessments.</b>
<b>2.4.4 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>2.4.5 Method used Population size</b>	<b>Estimate based on expert opinion with no or minimal sampling</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>2001-2012</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>unknown</b>	
	The number of occupied trees is thought to have remained stable, but the population trend within these trees is unknown. 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>	<b>a) Minimum</b>	
Optional		
	<b>b) Maximum</b>	
	<b>c) Confidence interval</b>	
<b>2.4.9 Short-term trend Method used</b>	<b>Estimate based on expert opinion with no or minimal sampling</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>	<b>1989-2012</b>	
Optional	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>unknown</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 expert opinion with no or minimal sampling</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>38</b>
	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>
	<b>d) Method used to set FRP</b>	<b>The FRV has been updated because the population unit has changed since the 2007 report. The FRV has been set at twice the estimated population of 19 inhabited trees. This is considered big enough to be viable and no smaller than the population when the Habitats Directive came into force in the UK.</b>
	The FRV has been updated because the population unit has changed since the 2007 report. The FRV has been set at twice the estimated population of 19 inhabited trees. This is considered big enough to be viable and no smaller than the population when the Habitats Directive came into force in the UK.	
<b>2.4.15 Reason for change</b> Is the difference between the	<b>a) Genuine change?</b>	<b>False</b>



value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	The change in population estimate is because the reporting unit has changed to number of inhabited trees.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	The change in population estimate is because the reporting unit has changed to number of inhabited trees.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>True</b>
The change in population estimate is because the reporting unit has changed to number of inhabited trees.		

2.5 Habitat for the species		
<b>2.5.1 Area estimation</b>	<b>1.87</b>	
	A small proportion of the broader habitat for this species is actually used by it; this estimate of 1.87 is the surface area of the sites that contain occupied trees. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.  There is not 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>Estimate based on expert opinion with no or minimal sampling</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 determined by observation at sites.</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>1991-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and	
	Optional	

	relevant country-level reporting information.	
<b>2.5.8 Long-term trend</b> <b>Trend direction</b>  Optional	<b>decrease</b>	
	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>1.87</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 was reported as unknown in 2007 so no comparison is possible.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	Surface area of habitat was reported as unknown in 2007 so no comparison is possible.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
Surface area of habitat was reported as unknown in 2007 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	
K01: abiotic (slow) natural processes	H	
M01: Changes in abiotic conditions	M	

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.6.1 Method used – Pressures</b>	<b>mainly based on expert judgement and other data</b>
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	
K01: abiotic (slow) natural processes	H	
K02: Biocenotic evolution, succession	H	
K04: Interspecific floral relations	M	

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 the current range is equal to the FRR and the current trend is stable.

##### b) Qualifier

#### 2.9.2 Population

##### a) Conclusion

**Bad**

Population has been assessed as Bad because the population estimate is more than 25% below the FRV for population.

##### b) Qualifier

**unknown**

The short term trend is unknown.

#### 2.9.3 Habitat for the species

##### a) Conclusion

**Bad**

Habitat has been assessed as Bad because there is insufficient habitat

	available to support a viable population and the short term trend is declining.	
	<b>b) Qualifier</b>	<b>declining</b>
	The short term trend is declining.	
<b>2.9.4 Future prospects</b>	<b>a) Conclusion</b>	<b>Bad</b>
	Future prospects is assessed as Bad on the basis of assessments of the future prospects of the three parameters, range, population and habitat for species:  Range future prospects: Poor (although short term trend has been stable, tree diseases combined with low replacement rate of veteran trees suggest there is a threat of a reduced range in the future)  Population future prospects: Bad  Habitat future prospects: Bad  Overall future prospects: Bad	
	<b>b) Qualifier</b>	<b>declining</b>
	The qualifier is decrease because the negative trend for habitat may continue into the future, causing declines in population and range.	
<b>2.9.5 Overall assessment of Conservation Status</b>	<b>Bad</b>	
	The overall assessment is Bad because population, habitat for species and future prospects have been assessed as Bad.	
<b>2.9.6 Overall trend in Conservation Status</b>	<b>declining</b>	
	On balance, the trend is decreasing.	

### 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 map 1x1 km grid cells</b>
	<b>b) Minimum</b>	<b>6</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>c) Maximum</b>	<b>6</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>Estimate based on expert opinion with no or minimal sampling</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)	<b>unknown</b>
Optional	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.														
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
3.1: Restoring/improving forest habitats				Y		M			Y		Y			
6.1: Establish protected areas/sites	Y					H			Y		Y			

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