

**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:

**S1014 - Narrow-mouthed whorl snail (*Vertigo  
angustior*)**

**NORTHERN IRELAND**

## **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 (Northern Ireland information only)
1.2 Species code	1014
1.3 Species scientific name	Vertigo angustior
1.4 Alternative species scientific name	
1.5 Common name (in national language)	Narrow-mouthed whorl snail

### 2. Maps

2.1 Sensitive species	No
2.2 Year or period	1994-2018
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?	<table> <tr> <td>a) regulations regarding access to property</td><td>No</td></tr> <tr> <td>b) temporary or local prohibition of the taking of specimens in the wild and exploitation</td><td>No</td></tr> <tr> <td>c) regulation of the periods and/or methods of taking specimens</td><td>No</td></tr> <tr> <td>d) application of hunting and fishing rules which take account of the conservation of such populations</td><td>No</td></tr> <tr> <td>e) establishment of a system of licences for taking specimens or of quotas</td><td>No</td></tr> <tr> <td>f) regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens</td><td>No</td></tr> <tr> <td>g) breeding in captivity of animal species as well as artificial propagation of plant species</td><td>No</td></tr> <tr> <td>h) other measures</td><td>No</td></tr> </table>	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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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

Anderson, R.A. (1996). Species inventory for Northern Ireland. Land and Freshwater Molluscs. Environment and Heritage Service, Research and Development Series.

Anderson, R., Long, M.P., Telfer, M.G., Mantell, A., Hart, A. (2017). Survey Report: Annex II species of *Vertigo* within Northern Ireland. Allen and Mellon Environmental, unpublished report.

Anderson, R., Long, M.P. (2016). Prospects and Requirements for Article 17 Reporting Round 2013-2018 on *Vertigo geyeri*, *Vertigo angustior* and *Vertigo moulinsiana*. Unpublished report.

Holyoak, G.A. (2003). Survey of rare *Vertigo* land-snail species in Northern Ireland, 2003. Unpublished report to the Environment and Heritage Service, Belfast.

Holyoak, G.A. (2005). Widespread occurrence of *Vertigo geyeri* (Gastropoda: Vertiginidae) in north and west Ireland. *Irish Naturalists' Journal* 28: 141-150.

Kerney, M.P. (1976). Atlas of the Non-marine Mollusca of the British Isles. Conchological Society of Great Britain and Ireland.

Kerney, M. P., 1999 Atlas of Land and Freshwater Molluscs of Britain and Ireland. Harley Books.

Moorkens, E.A. & Killeen, I.J. (2011) Monitoring and Condition Assessment of Populations of *Vertigo geyeri*, *Vertigo angustior* and *Vertigo moulinsiana* in Ireland. *Irish Wildlife Manuals*, No. 55. National Parks and Wildlife Service, Department of Arts, Heritage and Gaeltacht, Dublin, Ireland.

Ross, H.C.G (1984). Catalogue of the Land and Freshwater Mollusca of the British Isles in the Ulster Museum. Ulster Museum, Belfast, Publication No. 251.

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## 5. Range

5.1 Surface area (km <sup>2</sup> )	
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	
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 (km <sup>2</sup> ) 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	2013-2018
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    2
6.3 Type of estimate	Best estimate
6.4 Additional population size (using population unit other than reporting unit)	a) Unit b) Minimum c) Maximum d) Best single value
6.5 Type of estimate	
6.6 Population size Method used	Based mainly on extrapolation from a limited amount of data
6.7 Short-term trend Period	2007-2018
6.8 Short-term trend Direction	Uncertain (u)
6.9 Short-term trend Magnitude	a) Minimum b) Maximum c) Confidence interval
6.10 Short-term trend Method used	Insufficient or no data available

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6.11 Long-term trend Period

6.12 Long-term trend Direction

6.13 Long-term trend Magnitude

- a) Minimum
- b) Maximum
- c) Confidence interval

6.14 Long-term trend Method used

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)?

Unknown

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

Insufficient or no data available

7.3 Short-term trend Period

2007-2018

7.4 Short-term trend Direction

Unknown (x)

7.5 Short-term trend Method used

Insufficient or no data available

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
Abandonment of grassland management (e.g. cessation of grazing or mowing) (A06)	M
Intensive grazing or overgrazing by livestock (A09)	M
Sports, tourism and leisure activities (F07)	M
Other human intrusions and disturbance not mentioned above (H08)	M
Modification of hydrological flow (K04)	M

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

Abiotic natural processes (e.g. erosion, silting up, drying out, submersion, salinization) (L01)	M
Natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices) (L02)	H
Sea-level and wave exposure changes due to climate change (N04)	M
Droughts and decreases in precipitation due to climate change (N02)	M

Threat	Ranking
Abandonment of grassland management (e.g. cessation of grazing or mowing) (A06)	M
Intensive grazing or overgrazing by livestock (A09)	M
Sports, tourism and leisure activities (F07)	M
Other human intrusions and disturbance not mentioned above (H08)	H
Modification of hydrological flow (K04)	M
Abiotic natural processes (e.g. erosion, silting up, drying out, submersion, salinization) (L01)	M
Natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices) (L02)	H
Sea-level and wave exposure changes due to climate change (N04)	H
Droughts and decreases in precipitation due to climate change (N02)	H

## 8.2 Sources of information

## 8.3 Additional information

# 9. Conservation measures

9.1 Status of measures	a) Are measures needed? Yes
	b) Indicate the status of measures Measures identified and taken
9.2 Main purpose of the measures taken	Maintain the current range, population and/or habitat for the species
9.3 Location of the measures taken	Only inside Natura 2000
9.4 Response to the measures	Medium-term results (within the next two reporting periods, 2019-2030)
9.5 List of main conservation measures	

Maintain existing extensive agricultural practices and agricultural landscape features (CA03)
Adapt mowing, grazing and other equivalent agricultural activities (CA05)
Reduce impact of outdoor sports, leisure and recreational activities (CF03)
Reduce impact of other specific human actions (CH03)

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

Management of habitats (others than agriculture and forest) to slow, stop or reverse natural processes (CL01)

Restore habitats following geological and natural catastrophes (CL03)

Implement climate change adaptation measures (CN02)

## 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                      number of map 1x1 km grid cells (grids1x1)
- b) Minimum
- c) Maximum
- d) Best single value    2

### 12.2 Type of estimate

Best estimate

### 12.3 Population size inside the network Method used

Based mainly on extrapolation from a limited amount of data

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

Unknown (x)



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

Insufficient or no data available

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

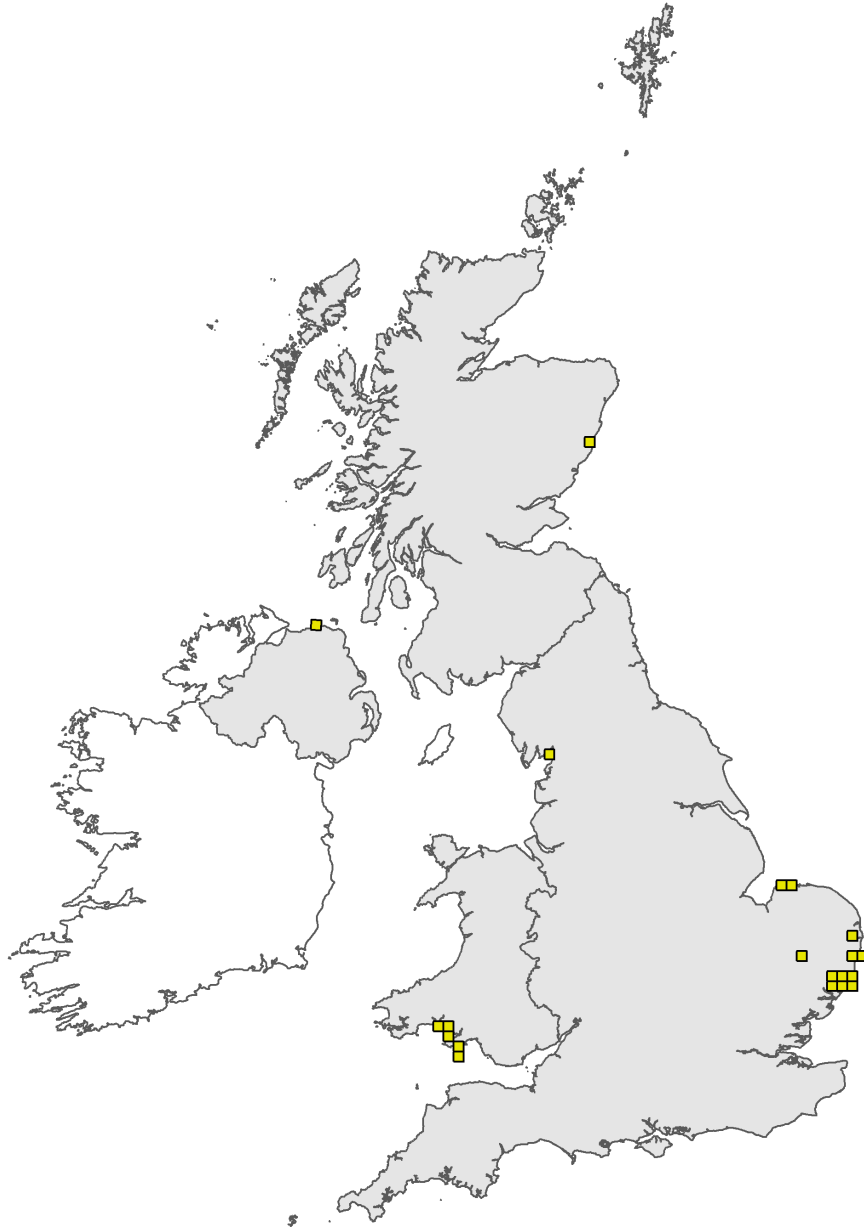


Figure 1: UK distribution map for S1014 - Narrow-mouthed whorl snail (*Vertigo angustior*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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 S1014 - Narrow-mouthed whorl snail (*Vertigo angustior*). 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: *Vertigo angustior* (1014) Region code: ATL**

Field label	Note
5.3 Short term trend; Direction	Range reported as stable, as no loss recorded from the colonies at the Giant's Causeway, the species' only known recent colony. Considered formerly abundant across Ireland the species is considered rare (Ross, 1984, Anderson, 1996; Kerney, 1999). Prior to 1950, the species was known to occur on the North Antrim coast (Ross, 1984). Shells of the species were known from other locations in Counties Antrim, L'Derry and Down but the age of these specimens was unknown (Kerney, 1999). In the 1990s, the species was still considered local, rare and disappearing in NI with the last record from NI in 1979 (Anderson, 1981). In 2001, extant populations of the species were discovered at two sites along the Giants Causeway (Holyoak, 2005). Subsequent surveys in 2003 revealed a further two sites containing the species along the north coast (Holyoak, 2005). Alongside the re-surveys for <i>V.geyeri</i> indicated above, efforts were taken in 2016 and 2016 to locate historic populations of <i>V. angustior</i> and (Anderson & Long, 2016) in 2017 to identify new populations ( Anderson et al., 2017).
5.11 Change and reason for change in surface area of range	Change and reason for change in surface area of range reported as no. 2 occupied 1x1km squares as recorded in 2013.
5.12 Additional information	Range derived from two NIEA commissioned surveys. A pilot undertaken in 2016 that involved re-surveying sites the species had been recorded historically (see Anderson and Long,(2016)). This was followed by a wider survey in 2017 that involved surveying of sites considered suitable for the species but where it had not been recorded previously (See Anderson et al., (2017)).
6.8 Short term trend; Direction	Short-term trends, for the period stated, is unknown as surveys for the species have only been undertaken in 2000 and 2016/17. Therefore, as monitoring has not occurred at other points in this period we can't comment on short-term trends in the species NI population.
6.12 Long term trend; Direction	Recent surveys have failed to find the species within some of the 1 x 1km squares where it was recorded historically. This is either due to species not being detected or represents a genuine loss of the species from these localities. Insufficient data to make any comment on long-term trend.
6.16 Change and reason for change in population size	Change and reason for change in population size reported as no. Note that the 2013 Report included a figure of 23 occupied 1x1 km squares, but this was an error.
6.17 Additional information	The NI reported population has apparently decreased from 23 (in the 2013 report) to 2 (current report). However, the figure of 23 from 2013 was an error. The reported value for this report reflects the correct situation. In the current reporting round (2013-2018) the species has been recorded in 2 1km squares at the Giant's Causeway (part of the North Antrim Coast SAC).
7.1 Sufficiency of area and quality of occupied habitat	Unknown stated as it is unclear what the long-term requirements of the species are, beyond flushes. It is not known how the species use this habitat.
8.1 Characterisation of pressures/ threats	Identification of threats and pressures faced by the species was derived - in part - from an exercise where experts (n=3) were asked to rank the importance of threats and pressures, reported in the previous assessment. A total of 3 species experts participated in the exercise. Additional threats and pressures added based upon NIEA knowledge of individual sites where the species has been recorded from in NI.
9.5 List of main conservation measures	This list has been identified based on the results of the threats and pressures assessment undertaken with species experts. A total of 3 experts contributed to this part of the exercise.

12.1 Population size inside  
the pSCIs, SCIs and SACs  
network

*V. angustior* recently recorded from 1 SAC - North Antrim Coast. Not seen at Bann  
Estuary for around 20 years.

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