# 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:

S1026 - Roman snail (Helix pomatia)

**ENGLAND** 

#### **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.

NATIONAL LEVEL		
1. General information		
1.1 Member State	UK (England information only)	
1.2 Species code	1026	
1.3 Species scientific name	Helix pomatia	
1.4 Alternative species scientific name		
1.5 Common name (in national language)	Roman snail	

### 2. Maps

2.1 Sensitive species	No
2.2 Year or period	2013-2018
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)

5. 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.	a) regulations regarding access to property	No
14 have been taken?	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

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

4.2 Sources of information

Atlantic (ATL)

M.B. Seddon, I.J. Killeen & A.P. Fowles. 2014. A Review of the Non-Marine Mollusca of Great Britain: Species Status No. 17. NRW Evidence Report No: 14, 84pp, Natural Resources Wales, Bangor.

http://jncc.defra.gov.uk/page-5848

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 H6210 - Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia)

Ondrej Korabek, Lucie Jurickova, Adam Petrusek; Splitting the Roman snail Helix pomatia Linnaeus, 1758 (Stylommatophora: Helicidae) into two: redescription of the forgotten Helix thessalica Boettger, 1886, Journal of Molluscan Studies, Volume 82, Issue 1, 1 February 2016, Pages 11-22,

https://doi.org/10.1093/mollus/eyv048

Kerney, M. P. Atlas of the Non-Marine Mollusca of the British Isles. Biological Records Centre (Institute of Terrestrial Ecology), Published by Institute of Terrestrial Ecology (1976).

#### 5. Range

5.1 Surface area (km²)

8154.48

5.2 Short-term trend Period

2013-2018

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 Based mainly on extrapolation from a limited amount of data 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) 7294 b) Operator c) Unknown d) Method The FRR is the same as in 2013. The value is considered to be large enough to support a viable population and no lower than the range estimate when the Habitats Directive came into force in the UK. For further information see the 2019 Article 17 UK Approach document. 5.11 Change and reason for change Use of different method in surface area of range The change is mainly due to: Use of different method 5.12 Additional information The current range surface area calculation does not represent the real range surface area. Change in availability of underpinning mapping data has resulted in an apparent decrease in range area compared to 2013, but this is not due to genuine change. Expert opinion considers the trend in range to be stable. The real range surface area is considered to be the range in 2013 - 9094.15km2. The current range surface area is above the FRR. For further information see the 2019 Article 17 UK Approach document. 6. Population 6.1 Year or period 2005-2018 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 43 6.3 Type of estimate Best estimate 6.4 Additional population size (using a) Unit number of map 10x10 km grid cells (grids10x10) population unit other than reporting b) Minimum unit) c) Maximum d) Best single value 37 6.5 Type of estimate Best 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

Stable (0)

- 6.9 Short-term trend Magnitude
- a) Minimum
- b) Maximum
- c) Confidence interval
- 6.10 Short-term trend Method used

Based mainly on extrapolation from a limited amount of data

- 6.11 Long-term trend Period
- 1995-2018
- 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
- 6.15 Favourable reference population (using the unit in 6.2 or 6.4)
- a) Population size
- b) Operator
- More than (>)
- c) Unknown
- d) Method

The FRP is the same as in 2013 and is no more than 25% above the current population. An FRP operator has been used because it has not been possible to calculate the exact FRP value. See the 2019 Article 17 UK Approach document for further information.

6.16 Change and reason for change in population size

Use of different method

The change is mainly due to: Use of different method

6.17 Additional information

Population data are derived from the dataset used to calculate range. Ad-hoc, unsystematic and variable effort observer recorded data has provided an estimate lower than that reported within the 3rd (2013) report and does not represent genuine change. This species is seen as Least Concern in the UK (Seddon et al, 2014). Declines are therefore seen as entirely a data artifact, and are not real. However, the current population is considered to be below the FRP, but not by more than 25%. For further information see the 2019 Article 17 UK Approach document.

#### 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

2001-2018

7.4 Short-term trend Direction

Stable (0)

7.5 Short-term trend Method used

Based mainly on extrapolation from a limited amount of data

7.6 Long-term trend Period

1989-2018

7.7 Long-term trend Direction

Stable (0)

7.8 Long-term trend Method used

Based mainly on extrapolation from a limited amount of data

7.9 Additional information

Species remains widespread across the limestone and chalk of southern England.

#### 8. Main pressures and threats

#### 8.1 Characterisation of pressures/threats

Pressure	Ranking
Conversion from other land uses to commercial / industrial areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F03)	M
Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	M
Threat	Ranking
Conversion from other land uses to commercial / industrial areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F03)	M
Roads, paths, railroads and related infrastructure (e.g.	M

#### 8.2 Sources of information

#### 8.3 Additional information

Roman snail was added to Schedule 5 of the Wildlife & Countryside Act in 2008, within this reporting period. This has given the requirement to consider the species in planning and will have stemmed the losses to some extent, though whether development has much of a role to play in the apparent losses is unlikley given the extent; more likely are habitat changes relating to cessation of habitat management, be that in woods or grasslands. The species is considered Least Concern in the UK (Seddon et al, 2014).

These impacts are extremely site specific, and usually reflect the preferences this species has for base-rich, warm, and free draining substrates that typically form the ballasts and cutting of transport infrastructure. This pressure does very little to reduce the population in England.

#### 9. Conservation measures

9.1 Status of measures

a) Are measures needed?

Yes

9.2 Main purpose of the measures

b) Indicate the status of measures

Both inside and outside Natura 2000

Measures identified and taken

taken

9.3 Location of the measures taken

9.4 Response to the measures

Short-term results (within the current reporting period, 2013-2018)

Maintain the current range, population and/or habitat for the species

9.5 List of main conservation measures

Reduce impact of service corridors and networks (CC06)

Habitat restoration of areas impacted by transport (CE06)

Manage conversion of land for construction and development of infrastructure (CF01)

9.6 Additional information

Roman snail was added to Schedule 5 of the Wildlife & Countryside Act in 2008.

#### 10. Future prospects

10.1 Future prospects of parameters

a) Rangeb) Populationc) Habitat of the speciesGood

10.2 Additional information

Future trend of Range is Overall stable; Future trend of Population is Overall stable; and Future trend of Habitat for the species is Positive - slight/ moderate improvement. However, the unfavourable-inadequate conclusion for the population parameter together with a stable future trend for population means the overall future prospects are unfavourable-inadequate. This species has maintained a Least Concern position within the UK IUCN mollusc review. For further information on how future trends inform the Future Prospects conclusion see the 2019 Article 17 UK Approach document.

#### 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

Favourable (FV)

Unfavourable - Inadequate (U1)

Favourable (FV)

Unfavourable - Inadequate (U1)

Unfavourable - Inadequate (U1)

Stable (=)

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

Conclusion on Range reached because: (i) the short-term trend direction in Range surface area is stable and (ii) the current Range surface area is not less than the Favourable Reference Range.

Conclusion on Population reached because: (i) the short-term trend direction in Population size is stable and (ii) the current Population size is not more than 25% below the Favourable Reference Population.

Conclusion on Habitat for the species reached because: (i) the area of occupied and unoccupied habitat is sufficiently large and (ii) the habitat quality is suitable for the long-term survival of the species; and (iii) the short-term trend in area of habitat is stable.

Conclusion on Future prospects reached because: (i) the Future prospects for Range are good; (ii) the Future prospects for Population are poor; and (iii) the Future prospects for Habitat for the species are

good

Overall assessment of Conservation Status is Unfavourable-inadequate because one of the conclusions is Unfavourable-inadequate.

Overall trend in Conservation Status is based on the combination of the short-term trends for Range - stable; Population - stable; and Habitat for the species - stable.

Overall assessment of conservation status has not changed since 2013.

Overall trend in conservation status has not changed since 2013.

#### 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)
- 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
- 12.5 Short-term trend of population size within the network Method used
- 12.6 Additional information

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

#### 13. Complementary information

13.1 Justification of % thresholds for trends

13.2 Trans-boundary assessment

13.3 Other relevant Information

The addition of this species to Schedule 5 of the Wildlife & Countryside Act has improved the conservation status in that mitigation meaures are now in place in many developments. A small number of licenced population translocations have been made, with the receptor sites being generally of good quality. The species remains widespread across a belt of southern England.

## **Distribution Map**

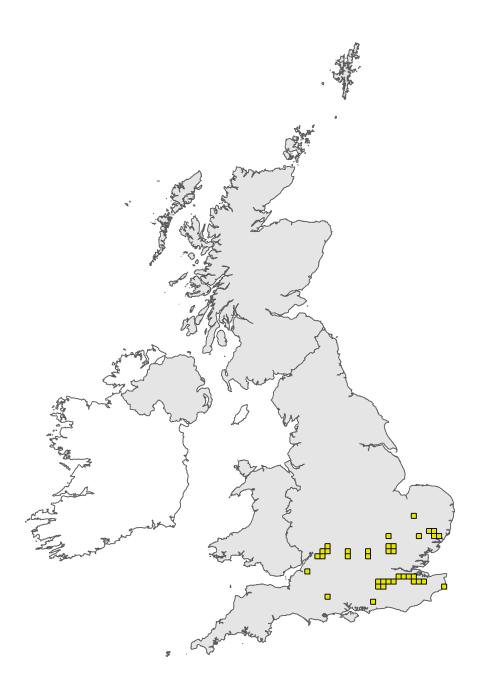


Figure 1: UK distribution map for S1026 - Roman snail (*Helix pomatia*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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 S1026 - Roman snail (*Helix pomatia*). 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**

Field label	Note
1.4 Alternative species scientific name	It is assumed, though not tested, that the long introduced Roman snail populations are H.pomatia and not the newly described H. thessalica from the Balkans, Greece etc (after Korabek et al, 2016).
3.1 Is the species take in the wild/ exploited	The farmed trade in Helix aspersa is more dominant in the UK; pomatia stock seem to be derived from wild collected European stock which are then imported.
Species name: Helix pomatia (	(1026) Region code: ATL
Field label	Note
9. Conservation measures	The addition of this species to Schedule 5 of the Wildlife & Countryside Act of protected species has improved the conservation status in that mitigation meaures are now in place in many developments that formerly might just have continued regardless. A small number of licenced population translocations have been made over the 4th period, with the receptor sites being generally of good quality and certainly capable of supporting the species. It remains widespread across a belt of southern England. The previous reporting period reported poaching, though there seem to be no further reports of such activity.
6.1 Year or period	The data range chosen here encompasses part of the third report period, as the 4th report period has an inadequate data provision. There is no evidence generally of losses of this widespread species, so it seems reasonable to assume a static population across the English range.
6.3 Type of estimate	Recording of this widespread species is ad hoc and unsystematic, so the recording effort between periods is naturally quite variable. It is not feasible to survey to any meaningful extent.
6.4 Additional population size	These data are entirely derived from the NBN Atlas for the short term period. As this is observer recorded data, it is ad hoc, and within this period much lower than that reported within the 3rd report.
6.5 Type of estimate	The date class for the hectad count again extends back into the 3rd report period, and estimates population stability over this period.
6.12 Long term trend; Direction	Kerney (1976) mapping this species demonstrates quite a similar picture with post 1950s records with that recoded, ad hoc, today, with a central band from the south Midlands dipping towards the South-east.
6.17 Additional information	The drop in reported 10km squares (it was only recorded in the 4th period in 14 hectads) is entirely a data artefact, since the records are not part of a structured survey but are based on ad hoc recording. The spread of the records remains equivalent in spread to the 3rd report, save for the south-eastern corner of England, suggesting constancy. However, much of the 4th period data has only been supplied at 10km resolution, ruling out any other precision option than ascribing a single monad to sit within its ten km square. The monad count is thus based on an extended 3rd period report to better reflect the true distribution and population strength.

#### 7.9 Additional information

There is 38,687 ha (JNCC) of lowland calcareous grassland in England which is the closest habitat type used by this species, although Helix pomatia may have a preference for a more structured sward than is present on most grassland sites, which tend to be managed short. Technically, the habitat is best described as calcareous edge habitat, as they seem to favour the junction between woodland and grassland, though ascribing them to the large areas of woodland, most of which is closed and over-shaded does not seem sensible. This figure is a better revision of the extent given in the 3rd Article 17 report, but does not indicate substantial loss.