

**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

Conservation status assessment for the species:

S1026 - Roman snail (*Helix pomatia*)

UNITED KINGDOM

IMPORTANT NOTE - PLEASE READ

- The information in this document represents 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.
- It is based on supporting information provided by the geographically-relevant Statutory Nature Conservation Bodies, which is documented separately.
- The 2019 Article 17 UK Approach document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Maps showing the distribution and range of the species are included (where available).
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the UK assessments. Further underpinning explanatory notes are available in the related country-level reports.
- 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; and/or (iii) the field was not relevant to this species (section 12 Natura 2000 coverage for Annex II species).
- The UK-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.

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NATIONAL LEVEL

1. General information

1.1 Member State	UK
1.2 Species code	1026
1.3 Species scientific name	<i>Helix pomatia</i>
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)

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

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

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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 (km ²)	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 in surface area of range	Use of different method	
	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 - 9094.15km ² . 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 population unit other than reporting unit)	a) Unit	number of map 10x10 km grid cells (grids10x10)
	b) Minimum	
	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)	

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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 c) Unknown d) Method	More than (>) 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 (for long-term survival)? b) Is there a sufficiently large area of unoccupied habitat of suitable quality (for long-term survival)?	Yes
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	

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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. bridges, viaducts, tunnels) (E01)	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 unlikely 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
- 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

Both inside and outside Natura 2000

9.4 Response to the measures

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

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.

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10. Future prospects

10.1 Future prospects of parameters

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

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

Favourable (FV)

11.2. Population

Unfavourable - Inadequate (U1)

11.3. Habitat for the species

Favourable (FV)

11.4. Future prospects

Unfavourable - Inadequate (U1)

11.5 Overall assessment of Conservation Status

Unfavourable - Inadequate (U1)

11.6 Overall trend in Conservation Status

Stable (=)

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

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

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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)

- 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

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

The addition of this species to Schedule 5 of the Wildlife & Countryside Act has improved the conservation status in that mitigation measures 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

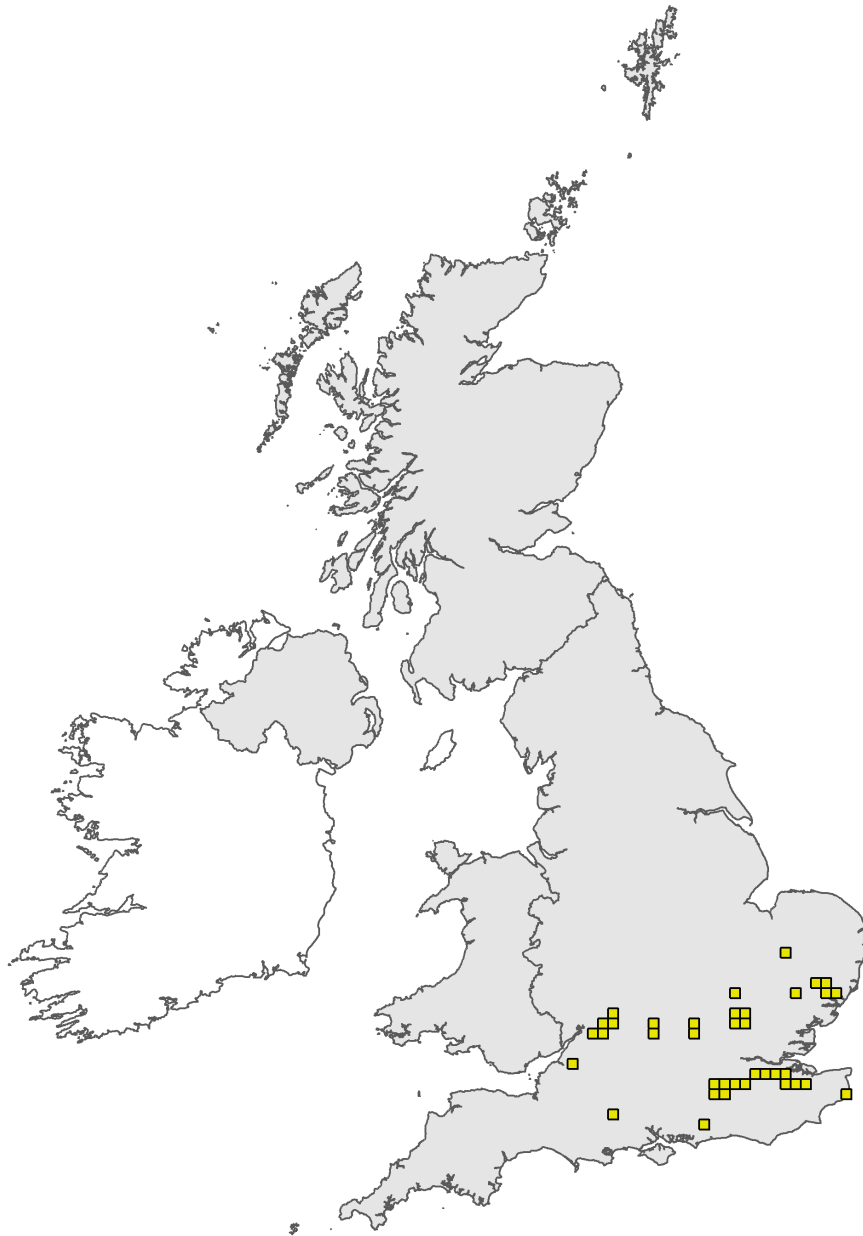


Figure 1: UK distribution map for S1026 - Roman snail (*Helix pomatia*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

Species name: *Helix pomatia* (1026)

Field label	Note
1.4 Alternative species scientific name	It is assumed, though not tested, that the long introduced Roman snail populations are <i>H.pomatia</i> and not the newly described <i>H. thessalica</i> from the Balkans, Greece etc (after Korabek et al, 2016).
3.1 Is the species taken in the wild/ exploited	The farmed trade in <i>Helix aspersa</i> is more dominant in the UK; <i>potamia</i> 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
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 recorded, ad hoc, today, with a central band from the south Midlands dipping towards the South-east.
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 <i>Helix pomatia</i> 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.
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 measures 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.

6.17 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.
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