

**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:

**S1326 - Brown long-eared bat (*Plecotus auritus*)**

**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.

# 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
1.2 Species code	1326
1.3 Species scientific name	<i>Plecotus auritus</i>
1.4 Alternative species scientific name	
1.5 Common name (in national language)	Brown long-eared bat

### 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	Complete survey or a statistically robust estimate
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?	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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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

England

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- Mathews, F., Kubasiewicz, L.M., Gurnell, J., Harrower, C., McDonald, R.A., Shore, R.F., 2018. A review of the population and conservation status of British Mammals. A report by The Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage.
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## 5. Range





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6.1 Year or period	1994-2018
6.2 Population size (in reporting unit)	<p>a) Unit number of map 1x1 km grid cells (grids1x1)</p> <p>b) Minimum</p> <p>c) Maximum</p> <p>d) Best single value 14482</p>
6.3 Type of estimate	Minimum
6.4 Additional population size (using population unit other than reporting unit)	<p>a) Unit number of individuals (i)</p> <p>b) Minimum 97000</p> <p>c) Maximum 2245000</p> <p>d) Best single value</p>
6.5 Type of estimate	95% confidence interval
6.6 Population size Method used	Complete survey or a statistically robust estimate
6.7 Short-term trend Period	2006-2018
6.8 Short-term trend Direction	Stable (0)
6.9 Short-term trend Magnitude	<p>a) Minimum</p> <p>b) Maximum</p> <p>c) Confidence interval</p>
6.10 Short-term trend Method used	Complete survey or a statistically robust estimate
6.11 Long-term trend Period	
6.12 Long-term trend Direction	
6.13 Long-term trend Magnitude	<p>a) Minimum</p> <p>b) Maximum</p> <p>c) Confidence interval</p>
6.14 Long-term trend Method used	
6.15 Favourable reference population (using the unit in 6.2 or 6.4)	<p>a) Population size</p> <p>b) Operator Approximately equal to (<math>\approx</math>)</p> <p>c) Unknown</p> <p>d) Method</p> <p>The FRP has changed since 2013. An FRP operator has been used because it has not been possible to calculate the exact FRP. The current population (individuals) is considered to be viable and is no less than when the Habitats Directive came into force in the UK. For further details see the 2019 Article 17 UK Approach document.</p> <p>The confidence limits for the population estimate are extremely wide and methodologies have changed. A best single value for the population has not been provided because of the level of uncertainty around the population estimate. Instead the lower and upper confidence intervals provide minimum and maximum limits to the population estimate.</p>

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## 6.16 Change and reason for change in population size

Improved knowledge/more accurate data  
Use of different method

The change is mainly due to: Use of different method

## 6.17 Additional information

The 1km square count has been calculated from the UK count of 1km squares where the species has been recorded. This is a minimum count because it only includes number of recorded occupied 1km squares. UK population estimates have been derived from the GB estimate in Mathews et al. (2018) and the Northern Ireland estimate from the 2013 Article 17 report.

The estimates by Harris et al. (1995) for the previous reporting rounds were based on expert judgement and extrapolation from limited field surveys. The 1995 population estimate for GB was based on very limited information. The new estimate, taken from Mathews et al. (2018) is considered to be more robust. The current population (in individuals) is considered to be approximately equal to the FRP and is sufficient to maintain a viable population.

## 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)? Yes

b) Is there a sufficiently large area of unoccupied habitat of suitable quality (for long-term survival)?

### 7.2 Sufficiency of area and quality of occupied habitat Method used

Based mainly on expert opinion with very limited data

### 7.3 Short-term trend Period

1995-2018

### 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

Habitable area as given by Mathews et al. (2018) has been used as a proxy for occupied habitat and is considered sufficient. There is no reliable measure of the quality of the occupied habitat, but the population trend is not showing a decline and the species continues to be widespread across a mosaic of habitats. It is therefore assumed that quality is sufficient to support a viable population of the species and maintain FCS.

## 8. Main pressures and threats

### 8.1 Characterisation of pressures/threats

Pressure	Ranking
Conversion from one type of agricultural land use to another (excluding drainage and burning) (A02)	M
Conversion from mixed farming and agroforestry systems to specialised (e.g. single crop) production (A03)	M

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Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.) (A05)	H
Conversion to other types of forests including monocultures (B02)	M
Logging without replanting or natural regrowth (B05)	H
Removal of dead and dying trees, including debris (B07)	H
Clear-cutting, removal of all trees (B09)	M
Forest management reducing old growth forests (B15)	M
Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	H
Construction or modification (e.g. of housing and settlements) in existing urban or recreational areas (F02)	H

Threat	Ranking
Conversion from one type of agricultural land use to another (excluding drainage and burning) (A02)	M
Conversion from mixed farming and agroforestry systems to specialised (e.g. single crop) production (A03)	H
Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.) (A05)	H
Conversion to other types of forests including monocultures (B02)	M
Logging without replanting or natural regrowth (B05)	M
Removal of dead and dying trees, including debris (B07)	H
Clear-cutting, removal of all trees (B09)	M
Forest management reducing old growth forests (B15)	M
Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	H
Construction or modification (e.g. of housing and settlements) in existing urban or recreational areas (F02)	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

Both inside and outside 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

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Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land (CA01)

Restore small landscape features on agricultural land (CA02)

Adapt/manage reforestation and forest regeneration (CB04)

Adapt/change forest management and exploitation practices (CB05)

Stop forest management and exploitation practices (CB06)

Reduce impact of transport operation and infrastructure (CE01)

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

Reduce impact of outdoor sports, leisure and recreational activities (CF03)

Other measures related to residential, commercial, industrial and recreational infrastructures, operations and activities (CF12)

## 9.6 Additional information

## 10. Future prospects

### 10.1 Future prospects of parameters

a) Range Good

b) Population Good

c) Habitat of the species Good

### 10.2 Additional information

Future trend in Range is Overall stable; Future trend in Population is Overall stable; and Future trend in Habitat for the species is Overall stable. 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

Favourable (FV)

### 11.3. Habitat for the species

Favourable (FV)

### 11.4. Future prospects

Favourable (FV)

### 11.5 Overall assessment of Conservation Status

Favourable (FV)

### 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 approximately equal to the Favourable Reference Range.

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

Conclusion on Population reached because: (i) the short-term trend direction in Population size is stable; and (ii) the current Population size is approximately equal to the Favourable Reference Population.

Conclusion on Habitat for the species reached because: (i) the area of occupied 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 and quality of habitat is unknown.

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

Overall assessment of Conservation Status is Favourable because all of the conclusions are Favourable.

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 – unknown.

Overall assessment of Conservation Status has not changed since 2013.

Overall trend in conservation status was not reported for this species in 2013. However, from the information available the overall trend would have been stable in 2013 and so there has been no change since the last reporting round.

## 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

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## 13.3 Other relevant Information

## Distribution Map

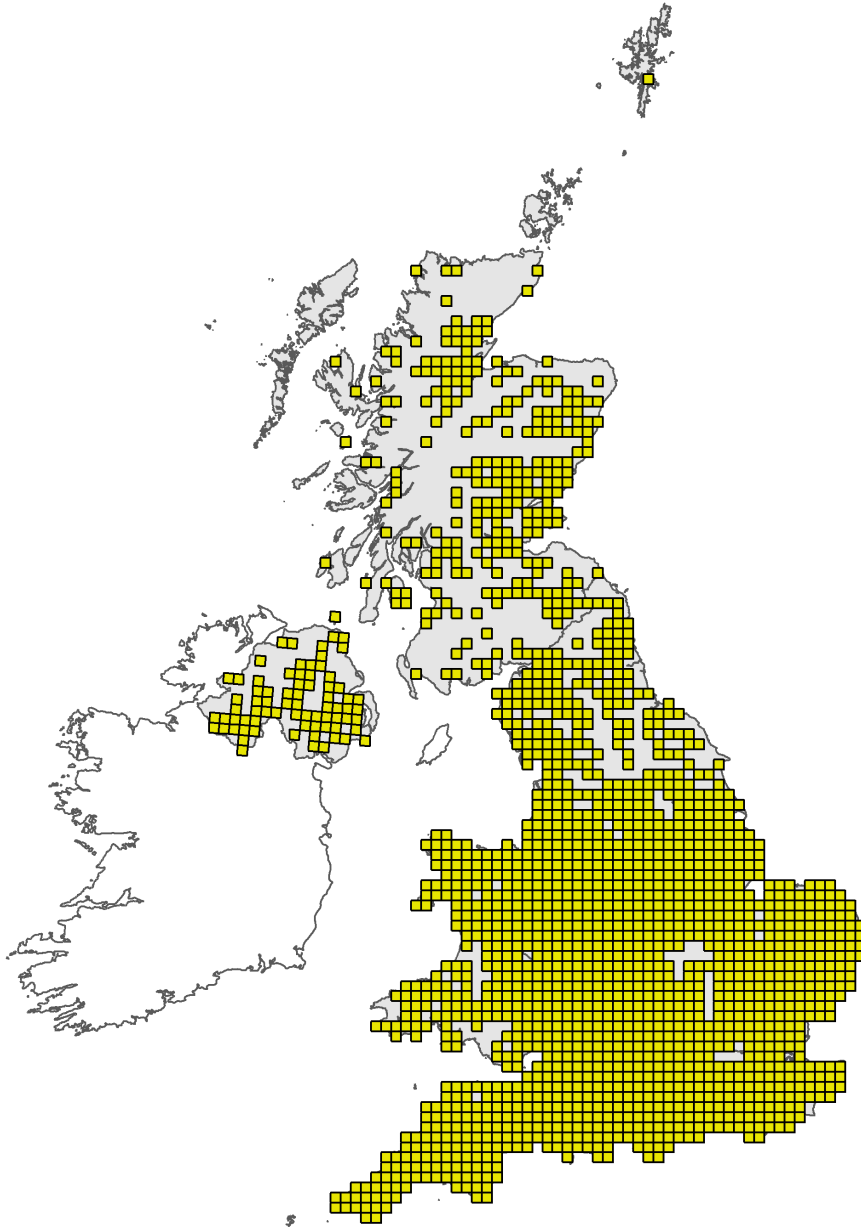


Figure 1: UK distribution map for S1326 - Brown long-eared bat (*Plecotus auritus*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

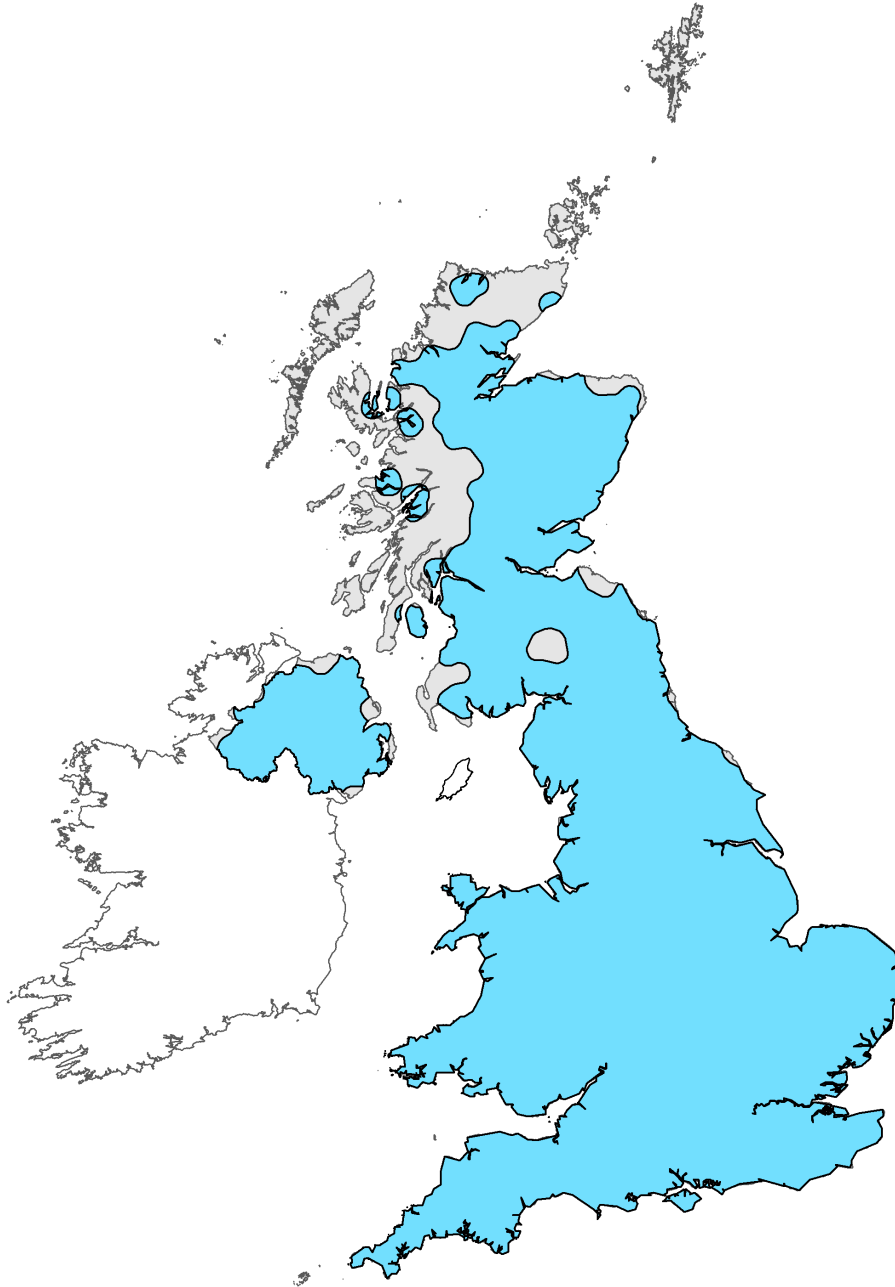


Figure 2: UK range map for S1326 - Brown long-eared bat (*Plecotus auritus*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The range map has been produced by The Mammal Society applying a range mapping tool as outlined in Matthews et al. (2018), 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: *Plecotus auritus* (1326)

Field label	Note
2.2 Year or Period	This time period has been selected as distribution has been calculated using data from Mathews et al 2018.
2.3 Distribution map	Range is based on presence data collected between 1995 and 2016. Areas that contain very isolated records may not have been included in the area of distribution