

**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

on the implementation of the Directive
from January 2007 to December 2012
Conservation status assessment for

Species:

S1261 - Sand lizard (*Lacerta agilis*)

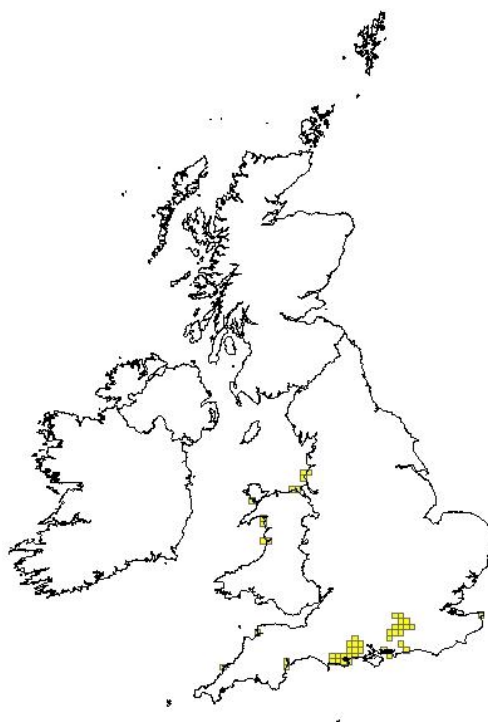
IMPORTANT NOTE – PLEASE READ

- The country-level reporting information contained in this document is a contribution to the Article 17 UK report for the habitat/species concerned.
- It has been provided by **Natural England** and refers only to the state of the habitat/species in **England** - it does not constitute an assessment for the whole of the UK.
- The Article 17 UK Approach document provides details on how this information has been used and, combined with information supplied by other Statutory Nature Conservation Bodies
- The format of the document is closely aligned to that set out by the European Commission for Member State reporting – as a result, some of the fields are not applicable at a country-level and have deliberately been left blank – in addition, the content of most fields is constrained by the EC reporting categories.

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>	
0.2 Species	0.2.1 Species code	S1261
	0.2.2 Species scientific name	<i>Lacerta agilis</i>
	0.2.3 Alternative species scientific name Optional	
	0.2.4 Common name Optional	Sand lizard

1.1 Maps			
1.1.1 Distribution map		Sensitive	False



1.1.2 Method used - map	Estimate based on partial data with some extrapolation and/or modelling		
	Partial data provided by bespoke surveys and volunteer monitoring		
1.1.3 Year or period	2007-2012		
	Reasonable proportion of known sand lizard sites surveyed during this period		
1.1.4 Additional distribution map	False		

1.1.5 Range map

2.1 Biogeographical region & marine regions

ATL

2.2 Published sources

- "ARNOLD, H.R. 1995. Atlas of amphibians and reptiles in Britain. ITE Research Publication No.10. HMSO, London.**
- BEEBEE, T.J.C. & GRIFFITHS, R.A. 2000. Amphibians and Reptiles: A Natural History of the British Herpetofauna. The New Naturalist series. HarperCollins, London.**
- BEEBEE, T.J.C. & ROWE, G. 2001. A genetic assessment of British populations of the sand lizard (*Lacerta agilis*). Herpetological Journal 11: 23-27.**
- CORBETT, K.F. 1988a. Distribution and status of the sand lizard *Lacerta agilis agilis* in Britain. *Mertensiella* 1: 92-99.**
- CORBETT, K.F. 1988b. Conservation strategy for the sand lizard *Lacerta agilis agilis* in Britain. *Mertensiella* 1: 101-109.**
- CORBETT, K.F. 1994. Pilot study for Sand Lizard UK Recovery Programme. English Nature Research Reports No.102. English Nature, Peterborough.**
- CORBETT, K.F. and MOULTON, N. 1998. Sand lizard Species Recovery Programme project (1994-1997): final report. English Nature Research Reports No. 288, English Nature, Peterborough.**
- CORBETT, K.F., & TAMARIND, D.L. 1979. Conservation of the sand lizard, *Lacerta agilis*, by habitat management. *British Journal of Herpetology* 5: 799-823.**
- EUROPEAN HABITATS FORUM. 2006. Towards European Biodiversity Monitoring. Assessment, monitoring and reporting of conservation status of European habitats and species. Wien, Cambridge, Bruxelles.**
- FEARNLEY, H. 2009. Towards the ecology and conservation of sand lizard (*Lacerta agilis*) populations in southern England. PhD Thesis, University of Southampton**
- GLEED-OWEN, C.P. 2004. Initial surveillance baseline datasets for the sand lizard *Lacerta agilis*, natterjack toad *Bufo calamita* and smooth snake *Coronella austriaca* in England. Report for English Nature, Peterborough.**
- GLEED-OWEN, C, BUCKLEY, J, CONEYBEER, J, GENT, T, MCCRACKEN, M, MOULTON, N, & WRIGHT, D. 2005. Costed plans and options for herpetofauna surveillance and monitoring. English Nature Research Report No. 663, English Nature, Peterborough.**

	<p>LANGTON, T.E.S., BECKETT, C.L. & DUNSMORE, I. 1993. UK herpetofauna: a review of British herpetofauna populations in a wider context. Report 99F2A069 to Joint Nature Conservation Committee. Joint Nature Conservation Committee, Peterborough.</p> <p>The Amphibian & Reptile Conservation Trust: Rare Species Database and Reptile and Amphibian Dataset (provided via the NBN Gateway)"</p>

2.3 Range					
2.3.1 Surface area Range					
2.3.2 Method used Surface area of Range	<p>Estimate based on partial data with some extrapolation and/or modelling</p> <p>Partial data provided by bespoke surveys and volunteer monitoring</p>				
2.3.3 Short-term trend Period					
2.3.4 Short term trend Trend direction					
2.3.5 Short-term trend Magnitude	<table border="1"> <tr> <td style="background-color: #e0e0e0;">a) Minimum</td> <td></td> </tr> <tr> <td style="background-color: #e0e0e0;">b) Maximum</td> <td></td> </tr> </table>	a) Minimum		b) Maximum	
a) Minimum					
b) Maximum					
2.3.6 Long-term trend Period					
2.3.7 Long-term trend Trend direction					
2.3.8 Long-term trend Magnitude	<table border="1"> <tr> <td style="background-color: #e0e0e0;">a) Minimum</td> <td></td> </tr> <tr> <td style="background-color: #e0e0e0;">b) Maximum</td> <td></td> </tr> </table>	a) Minimum		b) Maximum	
a) Minimum					
b) Maximum					
	Optional				

2.3.9 Favourable reference range	a) Value in km²	
	b) Operator for FRR	
	c) FRR is unknown (indicated by "true")	False
2.3.10 Reason for change Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to...	a) Genuine change?	False
	b) Improved knowledge/more accurate data?	False
	c) Use of different method (e.g. "Range tool")?	False

2.4 Population		
2.4.1 Population size estimation (using individuals or agreed exceptions where possible)	a) Unit	
	b) Minimum	
2.4.2 Population size estimation (using population unit other than individuals) Optional (<i>if 2.4.1 filled in</i>)	a) Unit	number of localities
		Many sand lizard sub-populations occur on discrete "foci", often centred on a topographic feature such as south facing slope or tumulus.
	b) Minimum	592
	c) Maximum	592

2.4.3 Additional information on population estimates / conversion Optional	a) Definition of "locality"	Sub-populations, often within wider metapopulations, centred on discrete "foci" such as tumuli or south facing slopes
	b) Method to convert data	
	c) Problems encountered to provide population size estimation	
2.4.4 Year or period	2007-2012	
	Reasonable proportion of known sand lizard sub-populations surveyed during this period	
2.4.5 Method used	Complete survey/ Complete survey or a statistically robust estimate	
Population size	GIS mapping of sub-populations, including an assessment of habitat quality on foci, backed up by sand lizard monitoring to ensure viable populations and breeding are present	
2.4.6 Short-term trend	2001-2012	
Period	Good data available for this period	
2.4.7 Short-term trend	stable	
Trend direction	The number of recognised sand lizard sub-populations in England increased by 16 (from 576 to 592) during this period, due to re-introductions and discovery of one new sub-population. However, an estimated 10% of foci were assessed as severely damaged by fire, grazing and other management at the end of the period, cancelling out gains elsewhere. The short-term trend direction can therefore only be considered stable at best	
2.4.8 Short-term trend	a) Minimum	
	b) Maximum	
Magnitude	c) Confidence interval	
2.4.9 Short-term trend	Estimate based on partial data with some extrapolation and/or modelling	
Method used	GIS mapping of sub-populations, including an assessment of habitat quality on foci, backed up by sand lizard monitoring to ensure viable populations and breeding are present	

2.4.10 Long-term trend – Period	1989-2012	
	Reasonable data available for this period	
2.4.11 Long-term trend Trend direction	stable	
	The number of recognised sand lizard sub-populations in England increased by 48 (from 544 to 592) during this period, due to re-introductions and discovery of new sub-populations. However, an estimated 10% of foci were assessed as severely damaged by fire, grazing and other management at the end of the period, cancelling out gains elsewhere. The long-term trend direction can therefore only be considered stable at best	
2.4.12 Long-term trend Magnitude Optional	a) Minimum	
	b) Maximum	
	c) Confidence interval	
2.4.13 Long term trend Method used	2	
	GIS mapping of sub-populations, including an assessment of habitat quality on foci, backed up by sand lizard monitoring to ensure viable populations and breeding are present	
2.4.14 Favourable reference population	a) Number of individuals/agreed exceptions/other units	
	b) Operator	
	c) FRP is unknown indicated by "true"	False
	d) Method used to set FRP	
2.4.15 Reason for change Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous	a) Genuine change?	True

reporting round mainly due to:	b) Improved knowledge/more accurate data?	False
	c) Use of different method (e.g. "Range tool")?	False

2.5 Habitat for the species	
2.5.1 Area estimation	38 Mostly lowland heathland, with about 10% of the habitat consisting of sand dunes
2.5.2 Year or period	2007-2012 Good data available for this period
2.5.3 Method used Habitat for the species	Estimate based on partial data with some extrapolation and/or modelling GIS mapping of sub-populations, including an assessment of habitat quality on foci, backed up by sand lizard monitoring to ensure viable populations and breeding are present
2.5.4 Quality of the habitat	a) Habitat quality Moderate Habitat is of high quality in some areas but in others an increasing proportion of features required by sand lizards is being damaged and degraded by management (especially grazing) and also by human disturbance and arson
	b) Assessment method Expert assessment, photographic recording and GIS mapping
2.5.5 Short-term trend Period	2001-2012 Reasonable data available for this period
2.5.6 Short-term trend Trend direction	stable An increase in the area of occupied habitat was recorded during this period, primarily due to re-introductions and discovery of one new sub-population. However, large areas of existing habitat were also damaged by negative factors such as arson and inappropriate conservation management, cancelling out many of the gains elsewhere. The short-term trend direction can therefore only be considered stable at best
2.5.7 Long-term trend Period	1989-2012 Reasonable data available for this period
2.5.8 Long-term trend Trend direction	stable An increase in the area of occupied habitat was recorded during this period, primarily due to re-introductions and discovery of new sub-populations. However, large areas of existing habitat were also damaged by negative factors such as arson and inappropriate

	conservation management, cancelling out many of the gains elsewhere. The long-term trend direction can therefore only be considered stable at best	
2.5.9 Area of suitable habitat for the species	a) Value in km²	148
	Significant areas of suitable heathland habitats are not occupied by sand lizards	
	b) Absence of data indicated as '0'	
2.5.10 Reason for change Is the difference between the value reported at 2.5.1 and the previous reporting round mainly due to	a) Genuine change?	True
	Physical increase in the number of heathland areas occupied by sand lizard sub-populations	
	b) Improved knowledge/more accurate data?	False
	c) Use of different method (e.g. "Range tool")?	False

2.6 Main pressures		
a) Pressure	b) Ranking	c) Pollution qualifier
	H = high importance M = medium importance L = low importance	
A04: grazing	H	
E01: Urbanised areas, human habitation	H	
G05: Other human intrusions and disturbances	H	
J01: fire and fire suppression	H	
K02: Biocenotic evolution, succession	H	
B01: forest planting on open ground	M	
B02: Forest and Plantation management & use	M	
B06: grazing in forests/ woodland	M	
G01: Outdoor sports and leisure activities, recreational activities	M	
J03: Other ecosystem modifications	M	
B04: use of biocides, hormones and chemicals (forestry)	L	OTX
C01: Mining and quarrying	L	

I01: invasive non-native species	L	

2.6.1 Method used – Pressures	mainly based on expert judgement and other data

2.7 Threats		
a) Threat	b) Ranking	c) Pollution qualifier
	H = high importance M = medium importance L = low importance	
A04: grazing	H	
E01: Urbanised areas, human habitation	H	
G05: Other human intrusions and disturbances	H	
J01: fire and fire suppression	H	
K02: Biocenotic evolution, succession	H	
B01: forest planting on open ground	M	
B02: Forest and Plantation management & use	M	
B06: grazing in forests/ woodland	M	
G01: Outdoor sports and leisure activities, recreational activities	M	
J03: Other ecosystem modifications	M	
M01: Changes in abiotic conditions	M	
M02: Changes in biotic conditions	M	
B04: use of biocides, hormones and chemicals (forestry)	L	OTX
C01: Mining and quarrying	L	
I01: invasive non-native species	L	

2.7.1 Method used – Threats	expert opinion
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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 (<i>assessment of conservation status at end of reporting period</i>)
Please refer to the United Kingdom assessment for this species.

3 Natura 2000 coverage & conservation measures - Annex II species (*only applies to species listed under Annex II of the Directive*)

3.1 Population	
3.1.1 Population size Estimation of population size included in the SAC network	a) Unit
	b) Minimum
	c) Maximum
3.1.2 Method used	
3.1.3 Trend of population size within the network (short-term trend)	

3.2 Conservation measures

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	f) Not evaluated

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