

**European Community Directive
on the Conservation of Natural Habitats
and of Wild Fauna and Flora
(92/43/EEC)**

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:

S4035 - Fisher's estuarine moth (*Gortyna borelii lunata*)

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	S4035
	0.2.2 Species scientific name	<i>Gortyna borelii lunata</i>
	0.2.3 Alternative species scientific name Optional	
	0.2.4 Common name Optional	

1.1 Maps			
1.1.1 Distribution map	True	Sensitive	False
	The distribution map is based on species records which are considered to be representative of the range within the current reporting period. For further details see the 2013 Article 17 UK Approach document.		



1.1.2 Method used - map	Complete survey/Complete survey or a statistically robust estimate
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
1.1.3 Year or period	2006-2012
	The distribution map is based on species records which are considered to be representative of the range within the current reporting period. For further details see the 2013 Article 17 UK Approach document.

1.1.4 Additional distribution map Optional	False
1.1.5 Range map	True The range map was produced by applying the UK range mapping tool to the distribution map presented in 1.1.4. The alpha value for this species was 20km. For further details see the 2013 Article 17 UK Approach document.



2.1 Biogeographical region & marine regions	ATL
2.2 Published sources	<p>Essex Biodiversity Project http://www.essexbiodiversity.org.uk Unpublished information, Natural England 2013. UK distribution map data sources</p> <p>NE. Emailed to JNCC (LH) by Jon Curson 08/08/2012. Data from Zoe Ringwood (NE lead for FEM Species Recovery Programme)</p> <p>UK Distribution Map data sources</p> <p>NE. Emailed to JNCC (LH) by Jon Curson 08/08/2012. Data from Zoe Ringwood (NE lead for FEM Species Recovery Programme)</p>

2.3 Range		
2.3.1 Surface area Range	395.82	
	The surface area of the range was calculated from the map presented in 1.1.5. For further details see the 2013 Article 17 UK Approach document.	
2.3.2 Method used Surface area of Range	Complete survey/ Complete survey or a statistically robust estimate	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.3.3 Short-term trend Period	2001-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.3.4 Short term trend Trend direction	increase	
	The short term trend direction was derived by comparing the range map in 1.1.5 with the range map produced in the 2007 report, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.3.5 Short-term trend Magnitude Optional	a) Minimum	
	b) Maximum	
2.3.6 Long-term trend Period Optional	1989-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.3.7 Long-term trend Trend direction Optional	increase	
	The long term trend direction was derived by comparing the range map in 1.1.5 with the range map produced in the 2007 report, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.3.8 Long-term trend Magnitude Optional	a) Minimum	
	b) Maximum	
2.3.9 Favourable reference range	a) Value in km²	48
	The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. For further details see the 2013 Article 17 UK Approach document.	

	b) Operator for FRR	
	c) FRR is unknown (indicated by "true")	False
	d) Method used to set FRR	The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. The value is considered to be large enough to support a viable population and no lower than the range estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document.
The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. The value is considered to be large enough to support a viable population and no lower than the range estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document.		
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?	True
	The increase in surface area of range is genuine. There are now two established colonies in Kent, which were not reported on in then last reporting period.	
	b) Improved knowledge/more accurate data?	False
	The increase in surface area of range is genuine rather than due to better data or use of a different method.	
	c) Use of different method (e.g. "Range tool")?	False
	The increase in surface area of range is genuine rather than due to better data or use of a different method.	

2.4 Population		
2.4.1 Population size estimation (using individuals or agreed exceptions where possible)	a) Unit	
	b) Minimum	
	c) Maximum	
2.4.2 Population size	a) Unit	number of localities

estimation (using population unit other than individuals) Optional (<i>if 2.4.1 filled in</i>)	The population unit is the same as reported in 2007.	
	b) Minimum	9
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	c) Maximum	9
2.4.3 Additional information on population estimates / conversion Optional	a) Definition of "locality"	Number of separate localities where discrete populations occur
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	b) Method to convert data	
	c) Problems encountered to provide population size estimation	
2.4.4 Year or period	2006-2011	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.5 Method used Population size	Estimate based on partial data with some extrapolation and/or modelling	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.6 Short-term trend Period	2001-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.7 Short-term trend Trend direction	increase	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.8 Short-term trend Magnitude Optional	a) Minimum	
	b) Maximum	
	c) Confidence interval	
2.4.9 Short-term trend	Estimate based on partial data with some extrapolation and/or	

Method used	modelling	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.10 Long-term trend – Period Optional	1989-2011	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.11 Long-term trend Trend direction Optional	increase	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.12 Long-term trend Magnitude Optional	a) Minimum	20
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	b) Maximum	25
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	c) Confidence interval	
2.4.13 Long term trend Method used Optional	Estimate based on partial data with some extrapolation and/or modelling	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.14 Favourable reference population	a) Number of individuals/agreed exceptions/other units	20
	The FRP has been set at 20 localities because this is the minimum number believed to be needed to be viable, and it is greater than the value in 1994.	
	b) Operator	
	c) FRP is unknown (indicated by "true")	False
	d) Method used to set FRP	The FRP has been set at 20 localities because this is the minimum number believed to be needed to be viable, and it is greater than the value when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

	The FRP has been set at 20 localities because this is the minimum number believed to be needed to be viable, and it is greater than the value when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.4.15 Reason for change Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	a) Genuine change?	True
	The increase in population is genuine. There are now two established colonies in Kent, which were not reported on in then last reporting period.	
	b) Improved knowledge/more accurate data?	False
	The increase in population is genuine rather than due to better data or use of a different method.	
	c) Use of different method (e.g. "Range tool")?	False
The increase in population is genuine rather than due to better data or use of a different method.		

2.5 Habitat for the species		
2.5.1 Area estimation	0.02	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information. There is not thought to be a sufficient amount of habitat in the UK to support a viable population of the species.	
2.5.2 Year or period	2010	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.3 Method used Habitat for the species	Complete survey/Complete survey or a statistically robust estimate	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.4 Quality of the habitat	a) Habitat quality	Good
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	b) Assessment method	All coastal areas containing good numbers of hog's fennel plant constitute good quality habitat and these are all known and mapped, with additional areas being created in Essex.
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	

2.5.5 Short-term trend Period	2000-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.6 Short-term trend Trend direction	stable	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.7 Long-term trend Period Optional	1989-2012	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.8 Long-term trend Trend direction Optional	unknown	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
2.5.9 Area of suitable habitat for the species	a) Value in km²	0.02
	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?	False
	The value reported is the same as in the 2007 report.	
	b) Improved knowledge/more accurate data?	False
	The value reported is the same as in the 2007 report.	
	c) Use of different method (e.g. "Range tool")?	False
	The value reported is the same as in the 2007 report.	

2.6 Main pressures		
a) Pressure	b) Ranking	c) Pollution qualifier
	H = high importance (max 5 entries) M = medium importance L = low importance	
A03: mowing / cutting of grassland	H	
L08: inundation (natural processes)	H	
A04: grazing	M	
D05: Improved access to site	M	
F03: Hunting and collection of wild animals (terrestrial)	M	
G01: Outdoor sports and leisure activities, recreational activities	M	

G05: Other human intrusions and disturbances	M	
J02: human induced changes in hydraulic conditions	M	

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

2.6.1 Method used – Pressures

mainly based on expert judgement and other data

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

2.7 Threats		
a) Threat	b) Ranking	c) Pollution qualifier
	H = high importance (max 5 entries) M = medium importance L = low importance	
A03: mowing / cutting of grassland	H	
J02: human induced changes in hydraulic conditions	H	
L08: inundation (natural processes)	H	
A04: grazing	M	
D05: Improved access to site	M	
G01: Outdoor sports and leisure activities, recreational activities	M	
G05: Other human intrusions and disturbances	M	

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

2.7.1 Method used – Threats

expert opinion

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

2.8 Complementary information

2.8.1 Justification of % thresholds for trends

2.8.2 Other relevant information	<p>In the last reporting period the Kent population was not reported on as it was considered to have originated from an unauthorised introduction. While this may well have been the case, this has not been proven and in any case the Kent population is now long-standing and well established and forms an important proportion (about 20%) of the total English population. Therefore it has been considered in this report, particularly as the Kent range has been put forward as a candidate Special Area of Conservation, specifically for this species (as has the Essex range).</p>
	<p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</p>
2.8.3 Trans-boundary assessment	

2.9 Conclusions (<i>assessment of conservation status at end of reporting period</i>)		
2.9.1 Range	a) Conclusion	Favourable
	<p>Range has been assessed as Favourable because surface area of range is greater than the FRV and the short term trend is increasing.</p>	
	b) Qualifier	
2.9.2 Population	a) Conclusion	Bad
	<p>Population has been assessed as Bad because the population estimate is more than 25% below the FRP, although the short term trend is increasing.</p>	
	b) Qualifier	improving
		<p>The short term population trend is increasing.</p>
2.9.3 Habitat for the species	a) Conclusion	Bad
	<p>Habitat for species has been assessed as Bad because there is not currently believed to be sufficient habitat to support a viable population, although the quality of habitat is good and the trend is currently stable.</p>	
	b) Qualifier	stable
		<p>Short term trend is stable.</p>
2.9.4 Future prospects	a) Conclusion	Inadequate
	<p>Future prospects is assessed as Inadequate on the basis of assessments of the future prospects of the three parameters, range, population and habitat for species:</p> <p>Range future prospects: Good</p> <p>Population future prospects: Poor (the population is still substantially below the FRP, and although currently increasing, remains at risk of natural stochastic events - such as tidal inundation)</p> <p>Habitat future prospects: Good (habitat creation planned for the future)</p>	

	is expected to more than compensate losses due to coastal erosion.) Overall future prospects: Inadequate.
	b) Qualifier improving
	The population and range are expected to continue to increase as areas are planted up with the larval food plant.
2.9.5 Overall assessment of Conservation Status	Bad
	The overall assessment is Bad because the assessment for population and habitat for species is Bad.
2.9.6 Overall trend in Conservation Status	improving
	On balance, the overall trend is increasing.

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 number of localities
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
	b) Minimum 9
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
	c) Maximum 9
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
3.1.3 Trend of population size within the network (short-term trend)	stable
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

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
2.1: Maintaining grasslands and other open habitats			Y			M			Y			Y			
6.1: Establish protected areas/sites				Y		H			Y		Y				
7.4: Specific single species or species group management measures				Y		H			Y		Y				

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.