

Report under The Conservation of Habitats and
Species Regulations 2017 (as amended),
Regulation 9A

2019-2024

Conservation status assessment for the species:

S4035 - Fisher's estuarine moth

(Gortyna borelii lunata)

England



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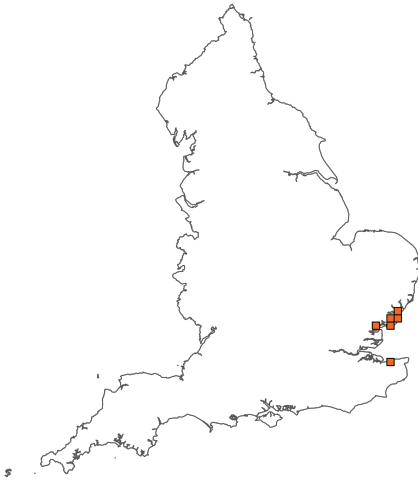
Important note - Please read

- The information in this document represents the England Report under The Conservation of Habitats and Species Regulations 2017 (as amended), Regulation 9A, for the period 2019-2024.
- It is based on supporting information provided by Natural England, which is documented separately.
- The Habitats Regulations reporting 2019-2024 Approach Document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- Maps showing the distribution and range of the species are included.
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the assessments. Further underpinning explanatory notes are available in the related country 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 National Site Network coverage for Annex II species).

Further details on the approach to the Habitats Regulations Reporting 2019-2024 are available on the [JNCC website](#).

Assessment Summary: Fisher's estuarine moth

Distribution Map



Range Map

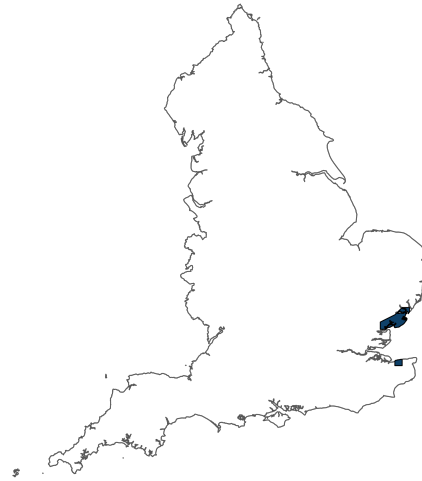


Figure 1: England distribution and range map for S4035 - Fisher's estuarine moth (*Gortyna borelii lunata*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority. The 10km grid square distribution map is based on available species records within the current reporting period.

Table 1: Table summarising the conservation status for S4035 - Fisher's estuarine moth (*Gortyna borelii lunata*). Overall conservation status for species is based on assessments of range, population, habitat for the species, and future prospects.

Overall Conservation Status (see section 11)

Favourable (FV)

Breakdown of Overall Conservation Status

Range (see section 5)	Favourable (FV)
Population (see section 6)	Favourable (FV)
Habitat for the species (see section 7)	Favourable (FV)
Future prospects (see section 10)	Unknown (XX)

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National Level

1. General information

1.1 Country	England
1.2 Species code	S4035
1.3 Species scientific name	<i>Gortyna borelii lunata</i>
1.4 Alternative species scientific name	
1.5 Common name	Fisher's estuarine moth
Annex(es)	II, IV

2. Maps

2.1 Sensitive species	No
2.2 Year or period	2010-2019
2.3 Distribution map	Yes
2.4 Distribution map; Method used	Complete survey or a statistically robust estimate

2.5 Additional information

We have only used data that were available under licence and we are aware that this does not provide a complete representation of the true distribution/range.

3. Information related to Annex V Species

3.1 Is the species taken in the wild / exploited?

3.2 What measures have been taken?

a) Regulations regarding access to property

b) Temporary or local prohibition on the taking of specimens in the wild and exploitation

c) Regulation of the periods and/or methods of taking specimens

d) Application of hunting and fishing rules which take account of the conservation of such populations

e) Establishment of a system of licences for taking specimens or of quotas

f) Regulation of the purchase, sale, offering for sale, keeping for sale, or transport for sale of specimens

g) Breeding in captivity of animal species as well as artificial propagation of plant species

Other measures

Other measures description

3.3: Hunting bag or quantity taken in the wild for Mammals and Acipenseridae (Fish)

a) Unit

Table 2: Quantity taken from the wild during the reporting period (see 3.3a for units). For species with defined hunting seasons, Season 1 refers to 2018/2019 (autumn 2018 to spring 2019), and Season 6 to 2023/2024. For species without hunting seasons, data are reported by calendar year: Year 1 is 2019, and Year 6 is 2024.

	Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
b) Minimum	-	-	-	-	-	-
c) Maximum	-	-	-	-	-	-
d) Unknown	-	-	-	-	-	-

3.4: Hunting bag or quantity taken in the wild; Method used

3.5: Additional information

No additional information

Biogeographical Level

4. Biogeographical and marine regions

4.1 Biogeographical or marine region where the species occurs ATL

4.2 Sources of information

See section 14 References

5. Range

5.1 Surface area (km ²)	642.58
5.2 Short-term trend; Period	2013-2024
5.3 Short-term trend; Direction	Increasing
5.4 Short-term trend; Magnitude	
a) Estimated minimum	
b) Estimated maximum	
c) Pre-defined range	
d) Unknown	
e) Type of estimate	
f) Rate of decrease	
5.5 Short-term trend; Method used	Complete survey or a statistically robust estimate
5.6 Long-term trend; Period	
5.7 Long-term trend; Direction	
5.8 Long-term trend; Magnitude	
a) Minimum	
b) Maximum	
c) Rate of decrease	

5.9 Long-term trend; Method used**5.10 Favourable Reference Range (FRR)**

a) Area (km ²)	48
b) Pre-defined increment	
c) Unknown	No
d) Method used	Other
e) Quality of information	

5.11 Change and reason for change in surface area of range

a) Change	Yes
b) Genuine change	Yes
c) Improved knowledge or more accurate data	No
d) Different method	No
e) No information	No
f) Other reason	No
g) Main reason	Genuine change

5.12 Additional information

The raw figure generated for range in this report is marginally higher than that given in the previous report. Data reported on the Essex Field Club website corroborates this increase with records from an increased number of hectads.

6. Population

6.1 Year or period 2019-2024

6.2 Population size (in reporting unit)

a) Unit	number of map 1x1 km grid cells
b) Minimum	

c) Maximum	
d) Best single value	30
6.3 Type of estimate	Best estimate
6.4 Quality of extrapolation to reporting unit	
6.5 Additional population size (using population unit other than reporting unit)	
a) Unit	
b) Minimum	
c) Maximum	
d) Best single value	
e) Type of estimate	
6.6 Population size; Method used	Complete survey or a statistically robust estimate
6.7 Short-term trend; Period	2013-2024
6.8 Short-term trend; Direction	Increasing
6.9 Short-term trend; Magnitude	
a) Estimated minimum	
b) Estimated maximum	
c) Pre-defined range	Increasing 26 - 50%
d) Unknown	No
e) Type of estimate	Best estimate
f) Rate of decrease	
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**

a) Minimum

b) Maximum

c) Confidence interval

d) Rate of decrease

**6.14 Long-term trend; Method
used**

6.15 Favourable Reference Population (FRP)

ai) Population size 14

a ii) Unit number of map 1x1 km grid cells

b) Pre-defined increment

c) Unknown No

d) Method used Expert opinion

e) Quality of information

6.16 Change and reason for change in population size

a) Change Yes

b) Genuine change Yes

**c) Improved knowledge or
more accurate data** No

d) Different method No

e) No information No

f) Other reason No

g) Main reason Genuine change

6.17 Additional information

Records shows that there is a continued expansion of population, mostly due to conservation efforts of planting areas with the larval foodplant.

6.18 Age structure, mortality and reproduction deviation No deviation from normal

7. Habitat for the species

7.1 Sufficiency of area and quality of occupied habitat (for long-term survival)

a) Is area of occupied habitat sufficient? Yes

b) Is quality of occupied habitat sufficient? Yes

c) If No or Unknown, is there a sufficiently large area of unoccupied habitat of suitable quality?

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

a) Sufficiency of area of occupied habitat; Method used Based mainly on expert opinion with very limited data

b) Sufficiency of quality of occupied habitat; Method used Based mainly on expert opinion with very limited data

7.3 Short-term trend; Period 2013-2024

7.4 Short-term trend; Direction Increasing

7.5 Short-term trend; Method used Based mainly on expert opinion with very limited data

7.6 Long-term trend; Period

7.7 Long-term trend; Direction

7.8 Long-term trend; Method used

7.9 Additional information

Additional areas continue to be planted with the larval foodplant thus increasing the area of habitat available for Fisher's Estuarine Moth.

8. Main pressures

8.1 Characterisation of pressures

Table 3: Pressures affecting the species, including timing and importance/impact ranking. Pressures are defined as factors acting currently and/or during the reporting period (2019–2024). Rankings are: High (direct/immediate influence and/or large spatial extent) and Medium (moderate direct/immediate influence, mainly indirect and/or regional extent).

Pressure	Timing	Ranking
PJ04: Sea-level rise due to climate change	Ongoing and likely to be in the future	High (H)
PJ06: Wave exposure changes due to climate change	Ongoing and likely to be in the future	High (H)

8.2 Sources of information

See section 14 References

8.3 Additional information

PJ04: This species is under serious threat in the medium term through sea level rise in its native range in Essex. It is not known for certain whether the Kent range is native or the result of an introduction, but these populations are more secure from sea level rise.

PJ06: This species is under serious threat in the medium term through sea level rise in its native range in Essex. It is not known for certain whether the Kent range is native or the result of an introduction, but these populations are more secure from sea level rise.

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

Expand the current range of the species (related to 'Range')

9.3 Location of the measures taken

Only outside National Site Network

9.4 Response to measures

Short-term results (within the current reporting period, 2019–2024)

9.5 List of main conservation measures

Table 4: Key conservation measures addressing current pressures and/or anticipated threats during the next two reporting periods (2025–2036). Measures are ranked by importance/impact: High (direct/immediate influence and/or large spatial extent) and Medium (moderate direct/immediate influence, mainly indirect and/or regional extent).

Conservation measure	Ranking
MJ01: Implement climate change mitigation measures	High (H)

9.6 Additional information

The larval foodplant, Hog’s Fennel, has been planted at Elmley (outside of SSSI) and at Moverons in Essex (outside SSSI).

10. Future prospects

10.1a Future trends of parameters

ai) Range Unknown

bi) Population Unknown

ci) Habitat for the species Unknown

10.1b Future prospects of parameters

aii) Range Unknown

bii) Population Unknown

cii) Habitat for the species Unknown

10.2 Additional information

The current trends for Range, Population and Habitat for the species are all increasing, suggesting the species should have good Future prospects. However, Fisher’s Estuarine Moth is threatened by sea level rise in the medium term. Habitat for the species is currently Favourable because there is sufficient habitat to support a viable population - this is due to the planting of Hog’s fennel in areas secure from sea level rise. It is not known whether these areas will provide stable, good quality habitat in the longer-term, or

how quickly sea level rise will threaten the main natural populations. Future prospects are therefore considered as Unknown at this time.

11. Conclusions

11.1 Range	Favourable (FV)
11.2 Population	Favourable (FV)
11.3 Habitat for the species	Favourable (FV)
11.4 Future prospects	Unknown (XX)
11.5 Overall assessment of Conservation Status	Favourable (FV)
11.6 Overall trend in Conservation Status	Improving

11.7 Change and reason for change in conservation status

This field is not reported as the period 2019-2024 marks the first instance in which conservation status has been assessed at the national level, meaning no comparisons to previous reports can be drawn.

11.7 Change and reason for change in conservation status trend

This field is not reported as the period 2019-2024 marks the first instance in which conservation status has been assessed at the national level, meaning no comparisons to previous reports can be drawn.

11.8 Additional information

Conclusion on Range reached because: (i) the short-term trend direction in Range surface area is increasing; and (ii) the current Range surface area is above the Favourable Reference Range.

Conclusion on Population reached because: (i) the short-term trend direction in Population size is increasing; and (ii) the current Population size is above 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 of habitat is increasing.

Conclusion on Future prospects reached because: (i) the Future prospects for Range, Population and Habitat for the species are all currently Unknown.

Overall assessment of Conservation Status is Favourable because three of the conclusions are Favourable and one is Unknown.

Overall trend in Conservation Status is based on the combination of the shortterm trends for Range – improving , Population – improving, and Habitat for the species – improving.

Overall Conservation Status is unchanged from 2013.

Overall Trend in Conservation Status has not changed since 2013.

12. UK National Site Network (pSCIs, SCIs, SACs) coverage for Annex II species

12.1 Population size inside the pSCIs, SCIs and SACs network

a) Unit	number of map 1x1 km grid cells
b) Minimum	
c) Maximum	
d) Best single value	8
12.2 Type of estimate	Best estimate
12.3 Population size inside the network; Method used	Complete survey or a statistically robust estimate
12.4 Short-term trend of population size within the network; Direction	Increasing
12.5 Short-term trend of population size within the network; Method used	Complete survey or a statistically robust estimate
12.6 Short-term trend of habitat for the species inside the pSCIs, SCIs and SACs network; Direction	Decreasing

12.7 Short-term trend of habitat for the species inside the pSCIs, SCIs and SACs network; Method used

Based mainly on extrapolation from a limited amount of data

12.8 Additional information

Records from surveys show this species to occupy 5 of the 1x1km squares in Hamford Water SAC in Essex and all 3 of the 1x1 km grid cells of Tankerton Slopes and Swalecliffe SAC in Kent. Some habitat has been lost at Hamford Water SAC due to tidal inundation hence the short-term decrease reported at field 12.6

13. Complementary information

13.1 Justification of percentage thresholds for trends

No justification information

13.2 Trans-boundary assessment

No trans-boundary assessment information

13.2 Other relevant information

No other relevant information

14. References

Biogeographical and marine regions

4.2 Sources of information

NBN Atlas - https://records.nbnatlas.org/occurrences/search?q=lsid:NHMSYS0000520248&fq=occurrence_status:present&nbn_loading=true

Clarke, D. 2023, Fisher's Estuarine Moth surveys at Tankerton Slopes 2023.

<https://www.essexfieldclub.org.uk/portal.php/p/Species+account/s/Gortyna+borelii>

Ringwood, Z. 2024, Fishers Estuarine Moth records 2018 to 2024. Unpublished

Ringwood, Z and Iley, M; 2025; Fishers Estuarine Moth: landscape-scale conservation action in response to coastal change; British Wildlife Vol 36.4, pp 273 - 281. February 2025.

Main pressures

8.2 Sources of information

No sources of information

15. Explanatory Notes

Field label	Note
5.10: Favourable Reference Range (FRR)	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 details see the 2019 Article 17 UK Approach document.
6.2: Population size	Survey reports show 30 1x1 grid cells to be occupied in the period covered by this reporting round. Data presented on the Essex Field Club web page suggests a potentially higher level of occupancy but is not date specific enough being 'after 1990' and so has not been included in this figure.
12.4: Short-term trend of the population size within the network; Direction	The report of 16 1x1 grid cells being occupied in the 2019 reporting round appears to have included all squares in error rather than just those within the SAC network. This may not be directly comparable with the 8 1x1 grid cells within the network reported at this round.
12.6: Short-term trend of the habitat for the species within the network; Direction	The area of habitat in the SAC network is decreasing because parts of Hamford Water SAC in Essex have become salt marsh that is unsuitable for the larval foodplant, due to breaches in sea defences, storm surges etc. Areas where the larval foodplant has been planted are mostly outside the SAC network. Overall there is a net loss of habitat in the SAC network.
6.9: Short-term trend; Magnitude	It was not possible to license a comprehensive set of distribution data to create the maps for this reporting round. They are believed not to include the full suite of hectads where the species has been recorded.