

REVISED RED LIST OF MACRO MOTHS IN HERTFORDSHIRE

Plant (2008. *The Moths of Hertfordshire*), created a list of candidate species recommended for inclusion in a categorised “Red List” of species of conservation concern that could be input by the appropriate local government departments and associated professional bodies to a county “Biodiversity Action Plan”. Species data analysed for the production of that list was accumulated up to the end of year 2006. In the 17 years since then, to

the end of 2023, significant new data have been gleaned and these have rendered changes to both the species included in the Red List and their categorisations therein. This current document updates and replaces that published in the 2008 book. **All species allocated to a Threat Category qualify for automatic inclusion in the Hertfordshire Biodiversity Action Plan**

HELP WITH RARE MOTHS

For the most up to date information on any listed species, please visit <https://hertsmidxmths.uk/index.php>. Planning officers, ecological consultants, wildlife consultants and landowners may e-mail the Hertfordshire County Moth Recorder at colinwllant@gmail.co for information. County Moth Recorder is a volunteer post and so may not get an immediate reply. My initial response will be free of charge, so please carefully consider the specific questions that you wish to be answered and don't forget to include a telephone number in case the response needs to be lengthy!

STATUS CATEGORIES AND THREAT CATEGORIES.

All species have a status category. However, not all species are under any sort of threat to their population strength, distributional range or any other aspect of their ecology. Consequently, not all species are allocated to a **Threat Category**. Hertfordshire **Status Categories** are defined as follows:

STATUS CATEGORIES

The legally applicable date for the initial application of these categories is 1st April 2024.

Category	Code	Attributes
Herts Extinct	X	<ol style="list-style-type: none">1. Species that were resident breeding species in Hertfordshire in the past but which have not been found in the area for fifty years (1974 or earlier) in spite of specialist searching;2. Species that were resident breeding species in Hertfordshire in the past but which have not been found in the area for fifty years (1974 or earlier) where specialist searching for them has not been undertaken to an adequate measure;3. species that were resident breeding species in Hertfordshire in the past but which have not been reported in the area for a period of less than 50 years but for which the evidence from survey suggests they are absent.
Herts Rare	R	<ol style="list-style-type: none">1. Species known or predicted to be breeding in five or less localities within the county regardless of the number of map squares affected regardless of whether threatened or not.
Herts Scarce	S	<ol style="list-style-type: none">1. Species known or predicted to be breeding in 6 to 30 localities within the county regardless of the number of map squares affected regardless of whether threatened or not.
Non-resident	N	<ol style="list-style-type: none">1. Immigrants2. Vagrants3. Adventives4. Other non-resident categories

THREAT CATEGORY DEFINITIONS

A “threat”, in any category, applies to the selected moth species as a resident. Some moths that are resident in the county may occasionally also appear as primary immigrants from overseas; these and all others from non-resident populations are to be ignored in threat analysis.

Threats to individual species may change over time. The effective date for the application of these categories is 1st January 2024. All species allocated to a Threat Category qualify for automatic inclusion in the Hertfordshire Biodiversity Action Plan.

Category	Code	Attributes
Herts Endangered (Highest threat category)	E	<ol style="list-style-type: none"> 1. Species that may be extinct in the county, but for which exists the possibility that they are overlooked rather than absent; 2. Herts Rare species that demonstrate a decline in the county since year 2000 and where none of the known sites for them has a long-term management plan that includes specifically identified proposals for this moth species; 3. Species that would otherwise be categorised as Vulnerable or Threatened, but which have declined rapidly in either population strength or distribution in recent years and are continuing to so decline in spite of conservation efforts; 4. Species that are known with reasonable certainty to be restricted to a single site in Hertfordshire even if that site is not currently threatened.
Herts Vulnerable (Middle threat category)	V	<ol style="list-style-type: none"> 1. Species categorised as ‘Herts Rare’ and believed to be declining in Hertfordshire but present on sites that either have a long-term management plan that includes specifically identified proposals for this moth species or which are not under any specific threat; 2. Species categorised as ‘Herts Scarce’ and believed to be declining in Hertfordshire and where none of these sites has a long-term management plan that includes specifically identified proposals for this moth species; 3. ‘Herts Rare’ species associated with a rare and threatened habitat, microhabitat or foodplant even if the moth itself does not appear to be declining;
Herts Threatened (Lowest threat category)	T	<ol style="list-style-type: none"> 1. Species categorised as ‘Herts Rare’ and believed to be declining in Hertfordshire but present on sites that either have a long term management plan that includes specifically identified proposals for this moth species or which are not under any specific threat for the present; 2. Species categorised as ‘Herts Scarce’ and believed to be declining in Hertfordshire and where none of these sites has a long term management plan that includes specifically identified proposals for this moth species; 3. ‘Herts Rare’ species associated with a rare and threatened habitat, microhabitat or foodplant even if the moth itself does not appear to be declining;
Herts Stable		<ol style="list-style-type: none"> 1. Species whose range and population strength in Hertfordshire has remained constant over the period 2000 to 2024 (including species that may rise and fall between years, provided that the trend line on the graphs for number of records received, population strength and number of occupied sites) has remained constant; 2. Species that are expected to continue to thrive without intervention in spite of existing or reasonably predictable human activities.
Increasing		<ol style="list-style-type: none"> 1. Species whose range and/ or population strength has increased in Hertfordshire over the period 2000 to 2024. Most of these will be immediately discernible from the three graph lines (number of records received; population strength, number of occupied sites) on the main page for each species at https://hertsmidxmths.uk/index.php
Insufficiently known (Data deficient species)		<ol style="list-style-type: none"> 1. Species for which there is inadequate data for us to allocate a threat category with any reasonable degree of certainty, but which we do not consider likely to be declining; 2. Species for which there is inadequate data for us to pass any opinion at all.

ANNOTATED SPECIES LISTS

FORMER RESIDENT SPECIES CURRENTLY CONSIDERED TO BE EXTINCT IN HERTFORDSHIRE

Taxon	English name	Year of last record
<i>Synanthedon culiciformis</i>	Large Red-belted Clearwing	1947
<i>Adscita geryon</i>	Cistus Forester	1940
<i>Eriogaster lanestris</i>	Small Eggar	1971
<i>Gastropacha quercifolia</i>	Lappet	2012
<i>Macrothylacia rubi</i>	Fox Moth	1961
<i>Hemaris tityus</i>	Narrow-bordered Bee Hawkmoth	1948

<i>Hemaris fuciformis</i>	Broad-bordered Bee Hawkmoth	1977
<i>Scopula ornata</i>	Lace Border	1969
<i>Scopula emutaria</i>	Rosy Wave	1961
<i>Cyclophora porata</i>	False Mocha	1937
<i>Phibalapteryx virgata</i>	Oblique Striped	1970
<i>Scotopteryx mucronata</i>	July Belle	1947
<i>Chloroclysta miata</i>	Autumn Green Carpet	1967
<i>Minoa murinata</i>	Drab Looper	1899
<i>Rheumaptera hastata</i>	Argent& Sable	1972
<i>Trichopteryx polycommata</i>	Barred Tooth-striped	1940
<i>Macaria wauaria</i>	V-moth	2009
<i>Selenia lunularia</i>	Lunar Thorn	2009
<i>Dyscia fagaria</i>	Grey Scalloped Bar	1914
<i>Perconia strigillaria</i>	Grass Wave	1937
<i>Clostera pigra</i>	Small Chocolate-tip	1948
<i>Orgyia recens</i>	Scarce Vapourer	1887
<i>Spilosoma urticae</i>	Water Ermine	1940
<i>Parasemia plantaginis</i>	Wood Tiger	1979
<i>Nudaria mundana</i>	Muslin Footman	1971
<i>Pechipogo strigilata</i>	Common Fan-foot	1961
<i>Anchoscelis helvola</i>	Flounced Chestnut	2011
<i>Jodia croceago</i>	Orange Upperwing	1834
<i>Xylena exsoleta</i>	Sword-grass	1946
<i>Dicycla oo</i>	Heart Moth	1971
<i>Orthosia miniosa</i>	Blossom Underwing	1980
<i>Anarta myrtilli</i>	Beautiful Yellow Underwing	1995
<i>Polia hepatica</i>	Silvery Arches	1970
<i>Sideridis reticulata</i>	Bordered Gothic	1972
<i>Mythimna turca</i>	Double Line	1937
<i>Mythimna pudorina</i>	Striped Wainscot	1937
<i>Spaelotis ravidata</i>	Stout Dart	2001
<i>Meganola strigula</i>	Small Black Arches	1941
<i>Xanthorhoe ferrugata</i>	Dark-barred Twin-spot Carpet	2007

RESIDENT MOTH SPECIES REGARDED AS ENDANGERED IN HERTFORDSHIRE

Taxon	English name	Category
<i>Polia bombycina</i>	Pale Shining Brown	E1
<i>Mniotype adusta</i>	Dark Brocade	E1
<i>Scotopteryx bipunctaria</i>	Chalk Carpet	E2
<i>Scopula immutata</i>	Lesser Cream Wave	E2
<i>Euphyia biangulata</i>	Cloaked Carpet	E2
<i>Trichiura crataegi</i>	Pale Eggar	E2
<i>Eupithecia plumbeolata</i>	Lead-coloured Pug	E2
<i>Angerona prunaria</i>	Orange Moth	E3
<i>Xestia baja</i>	Dotted Clay	E3
<i>Adscita statices</i>	Forester	E4
<i>Cosmia diffinis</i>	White-spotted Pinion	E4
<i>Hydraecia petasitis</i>	Butterbur	E4

RESIDENT MOTH SPECIES VULNERABLE IN HERTFORDSHIRE

Taxon	English name	Category
<i>Eulithis testata</i>	Chevron	V1
<i>Eupithecia trisignaria</i>	Triple-spotted Pug	V1
<i>Rheumaptera undulata</i>	Scallop Shell	V1
<i>Ematurga atomaria</i>	Common Heath	V1
<i>Charissa obscurata</i>	Annulet	V1
<i>Cucullia lychnitis</i>	Striped Lychnis	V1
<i>Cirrhia ocellaris</i>	Pale-lemon Sallow	V1
<i>Triphosa dubitata</i>	Tissue	V2
<i>Pelurga comitata</i>	Dark Spinach	V2
<i>Eulithis mellinata</i>	Spinach	V2
<i>Abraxas sylvata</i>	Clouded Magpie	V2
<i>Cucullia chamomillae</i>	Chamomile Shark	V2
<i>Eulithis testata</i>	Chevron	V2
<i>Hydriomena impluviata</i>	May Highflier	V2
<i>Melanthia procellata</i>	Pretty Chalk Carpet	V2
<i>Chesias legatella</i>	Streak	V2
<i>Colostygia multistrigaria</i>	Mottled Grey	V3

RESIDENT MOTH SPECIES REGARDED AS “THREATENED” IN HERTFORDSHIRE

Taxon	English name	Category
<i>Diloba caeruleocephala</i>	Figure of Eight	T3
<i>Jodis lactearia</i>	Little Emerald	T2
<i>Eupithecia pygmaeata</i>	Marsh Pug	T2
<i>Autographa jota</i>	Plain Golden Y	T2
<i>Cirrhia gilvago</i>	Dusky-lemon Sallow	T3
<i>Naenia typica</i>	Gothic	T3
<i>Ceramica pisi</i>	Broom Moth	T2
<i>Anchoscelis litura</i>	Brown-spot Pinion	T2
<i>Graphiphora augur</i>	Double Dart	T2

End of document