

Local Biodiversity Action Plan Review 2016: Moths

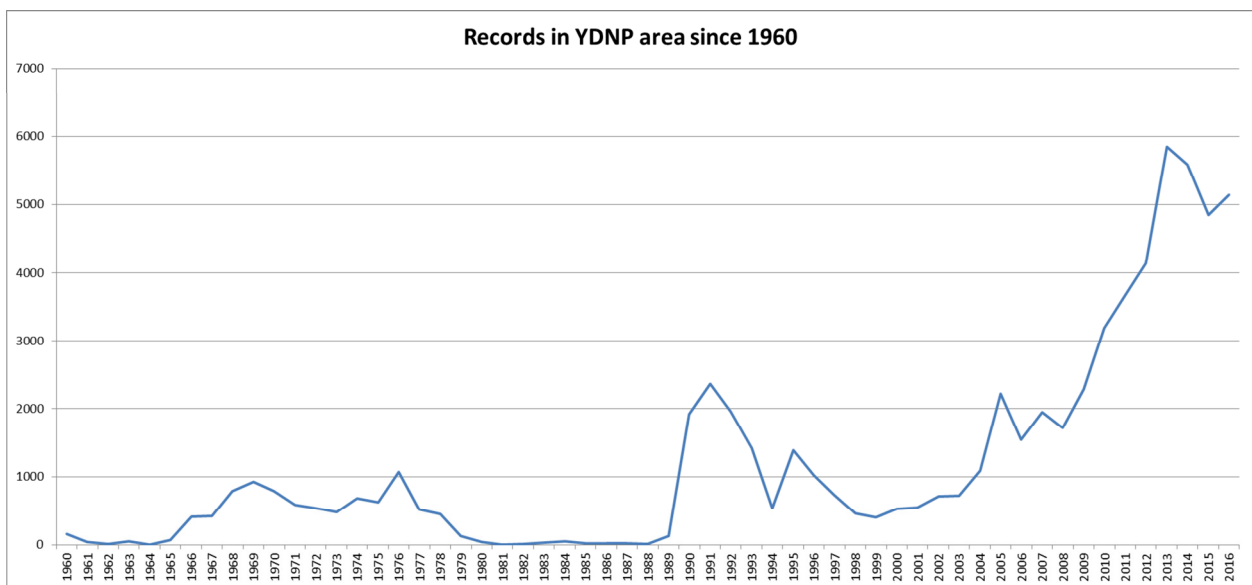
The Local Biodiversity Action Plan (LBAP) for the Yorkshire Dales National Park (YDNP) - Nature in the Dales 2020 outlines the conservation objectives for the national Biodiversity Action Plan (BAP) priority species in the Yorkshire Dales National Park.

There are 45 national BAP priority species of moth that are considered to occur within the pre-2016 YDNP boundary. An assessment of the population status of these priority species was undertaken by the Yorkshire Naturalists' Union Macro Moth Recorder at the end of the 2016 calendar year as part of the LBAP Trends and Status Review. At least 23 (51%) species were found to be stable, 2 (4%) were increasing, 4 (9%) were in decline and there were too few records to determine the status of a further 16 (36%) species.

There is an LBAP action 'to continue to increase the number of records submitted annually to the National Macro-moth Recording Scheme'. There are a number of initiatives to encourage more people to undertake moth trapping that have been instigated by a number of organisations including Butterfly Conservation, Yorkshire Naturalists Union, the Yorkshire Dales Butterfly and Moth Action Group and Yorkshire Dales National Park Authority (YDNPA).

The numbers of moth records that have been trapped annually at sites within the YDNP and submitted to the county moth recorder in 2016 are shown in figure 1. Although there was a slight increase in 2016, this total remains lower than the peak in 2013.

Figure 1. The numbers of moth records that have been trapped at sites within the Yorkshire Dales National Park and submitted to the Yorkshire Naturalists' Union Macro Moth Recorder between 1960 and 2016.



A summary of the trends status of the LBAP moth species in 2016 in the YDNP and across the county are shown in tables 1 to 3. A summary of the trends and status of other endangered moth species that occur in the YDNP are shown in table 4.

Table 1. The Trends and Status of LBAP Moth Species Covered by General Light Trapping in the Yorkshire Dales National Park in 2016.

Species	Scientific Name	% change in Yorks in 2016	Yorkshire status	YDNP population	YDNP status	YDNP 2016
Ghost Moth	<i>Hepialus humuli</i>	+10%	Common and widespread	Common and widespread	Stable	Fewer records this year with just three sites
Pale Eggar	<i>Trichiura crataegi</i>	Numbers too small	Local and declining	Rare	Stable in uplands.	Good numbers from Carperby Moor in September
Oblique Carpet	<i>Orthonama vittata</i>	Numbers too small	Local with stable population	Rare	Possible increase in YDNP	Encouraging records from Dentdale, Ingleborough and (just outside boundary) Settle
Shaded Broad-bar	<i>Scotopteryx chenopodiata</i>	+5%	Common and stable	Local	Probably stable	Just one record from Swarth Moor. Never common on the upper ground
Galium Carpet	<i>Epirrhoe galiata</i>	Numbers too small	Local in uplands	Local	Probably stable though seemed to be commoner in 1990s	One just outside boundary at Settle. Never common
Dark Spinach	<i>Pelurga comitata</i>	-16%	Local with decline in numbers	Local	Too few records to assess	No records in YDNP where it remains rare. Commoner in the lowlands.
Spinach	<i>Eulithis mellinata</i>	Numbers too small	Severe decline.	Unknown	Decreasing	Another at Skyreholme. In national decline and now rare in the county
Small Phoenix	<i>Ecliptopera silaceata</i>	+3%	Common and widespread	Common and widespread	Stable	A common moth with a healthy population, particularly in wooded areas.
Latticed Heath	<i>Chiasmia clathrata</i>	-8%	Fairly common, slight decline	Fairly widespread	Probable long-term decline numbers	Just the one record from Ribblesdale this year

Species	Scientific Name	% change in Yorks in 2016	Yorkshire status	YDNP population	YDNP status	YDNP 2016
Dusky Thorn	<i>Ennomos fuscantaria</i>	+140%	Declining, rare in the west	Uncommon	Recent increase following long-term decline	Surprisingly three records in 2016. Usually rare. Big increase countywide in 2016
September Thorn	<i>Ennomos erosaria</i>	+199%	Local in centre of county	Rare	Too few records to assess changes	Rare in the Dales with few recent records. None in 2016
Figure of Eight	<i>Diloba caeruleocephala</i>	Numbers too small	Declining, absent from south	Rare	Severe national and local decline	None in the park since 1993 though one at Ingleton this year.
Garden Tiger	<i>Arctia caja</i>	-15%	Stable after recent decline	Uncommon	Low numbers but possible recent increase in YDNP	Three records plus several just outside boundary so another good year. Never common in YDNP
White Ermine	<i>Spilosoma lubricipeda</i>	+6%	Common and widespread	Common and widespread	Stable	A healthy stable population. Present all over the Dales in good numbers. No evidence of decline
Buff Ermine	<i>Spilosoma luteum</i>	+6%	Common and widespread	Local	Probably stable	Scattered records in south east of YDNP. Rare elsewhere and absent from higher ground.
Cinnabar	<i>Tyria jacobaeae</i>	-20%	Common and widespread	Common and widespread	Probably stable	Several records from the Ingleborough area but none elsewhere
Garden Dart	<i>Euxoa nigricans</i>	Numbers too small	Rare and declining	Very rare	Probably absent	Extremely rare in the county. Last one in YDNP trapped at Ballowfields in 2010
Double Dart	<i>Graphiphora augur</i>	-24%	Declining in the west	Rare	Too few records to assess. Probably declining	No records in the Dales after the three from Malham in 2014

Species	Scientific Name	% change in Yorks in 2016	Yorkshire status	YDNP population	YDNP status	YDNP 2016
Autumnal Rustic	<i>Eugnorisma glareosa</i>	+37%	Common and stable	Common and widespread	Stable	A healthy number of records from several sites in the Dales
Small Square-spot	<i>Diarsia rubi</i>	+48%	Common and stable	Common and widespread	Stable	A healthy number of records from several sites in the Dales
Neglected Rustic	<i>Xestia castanea</i>	Numbers too small	Fairly common in uplands	Unknown	Too few records to assess	Probably under-recorded. Two records from Skyreholme were first in YDNP since 2013
Heath Rustic	<i>Xestia agathina</i>	Numbers too small	Fairly common in uplands	Unknown	Too few records to assess	Again probably under-recorded. Big Yorkshire increase in 2016. Records at Carperby Moor first in YDNP since 2008
Dot Moth	<i>Melanchra persicariae</i>	-1%	Common in the lowlands	Rare	Too few records to assess	A lowland moth rarely found in upland areas. Two at Grassington were unusual
Broom Moth	<i>Ceramica pisi</i>	-26%	Common and widespread	Common and widespread	Stable	A healthy population in the Dales where it is widespread
Hedge Rustic	<i>Tholera cespitis</i>	Numbers too small	Very local but widespread	Very rare	Probably absent	Dib Scar 1991 is the only record
Powdered Quaker	<i>Orthosia gracilis</i>	-9%	Fairly common and widespread	Unknown	Stable	Good numbers at several sites
Minor Shoulder-knot	<i>Brachylomia viminalis</i>	Numbers too small	Serious county-wide decline	Uncommon	Too few records to assess	None in YDNP this year
Sprawler	<i>Asteroscopus sphinx</i>	+34%	Stable and fairly widespread	Local	Too few records to assess	Under-recorded as it flies late. None in YDNP this year

Species	Scientific Name	% change in Yorks in 2016	Yorkshire status	YDNP population	YDNP status	YDNP 2016
Brindled Ochre	<i>Dasypolia templi</i>	Numbers too small	Under-recorded in uplands and coast	Local	Probably stable	One record at Skyreholme. Probably under-recorded because of flight time
Green-brindled Crescent	<i>Allophyes oxyacanthae</i>	-17%	Common and widespread	Uncommon	Probably stable	A woodland moth so not common in the Dales. Two records this year from Freeholders Wood.
Dark Brocade	<i>Mniotype adusta</i>	-46%	Very common in uplands	Very common	Stable	A good spread of records from upland areas
Flounced Chestnut	<i>Agrochola helvola</i>	+201%	Local in woodland	Rare	Too few records to assess	Encouraging records from Carperby Moor and Skyreholme. Flies late so could be under-recorded
Brown-spot Pinion	<i>Agrochola litura</i>	+6%	Widespread. Population fairly stable	Uncommon	Too few records to assess	Records from Carperby Moor and Skyreholme are first in YDNP since 2005. Usually rare in west of county
Centre-barred Sallow	<i>Atethmia centrago</i>	+37%	Common and widespread	Probably common	Stable	A typical year with records scattered across the Dales. No real change in numbers.
Grey Dagger	<i>Acronicta psi</i>	Unknown	Probably widespread and common	Probably common	Too few records to assess	Problems monitoring as needs dissection to separate from Dark Dagger. Again, one confirmed record from one site
Knot Grass	<i>Acronicta rumicis</i>	+28%	Common, especially in the uplands	Very common	Stable	Widespread and common. Lots of records in 2016

Species	Scientific Name	% change in Yorks in 2016	Yorkshire status	YDNP population	YDNP status	YDNP 2016
Mouse Moth	<i>Amphipyra tragopoginis</i>	+14%	Common and widespread. Stable	Uncommon	Too few records to assess	Again no records in the YDNP. Much commoner on the lower ground
Dusky Brocade	<i>Apamea remissa</i>	-20%	Common and widespread. Stable	Common and widespread	Stable	Records from all over the Dales

Table 2. The Trends and Status of LBAP Moth Species Requiring Targeted Trapping in the Yorkshire Dales National Park in 2016.

Species	Latin Name	% change in Yorks in 2016	Yorkshire status	YDNP population status	YDNP status	YDNP 2016
Red Carpet	<i>Xanthorhoe decoloraria</i>	Numbers too small	Local in the uplands	Local but widespread	Probably stable	Unusually there were no records this year, but it is never common anywhere
Grey Mountain Carpet	<i>Entephria caesiata</i>	Numbers too small	Fairly common in the uplands	Declining	Declining	Another year with no records. Seems to have become much rare after 2005
Grass Rivulet	<i>Perizoma albulata</i>	Numbers too small	Widespread but local	Uncommon and local	Too few records to assess	No records in 2016. Local in the dales where yellow rattle grows. Commoner elsewhere.
V-moth	<i>Macaria wauaria</i>	Numbers too small	Serious national and county decline	Becoming rare	Possibly stabilising after severe recent decline	An encouraging record from Bellerby. Two records just outside park boundary
Anomalous	<i>Stilbia anomala</i>	Numbers too small	Fairly common in the uplands	Fairly common but local	Probably stable	Records from Ingleborough and Carperby moor after a blank in 2015

Table 3. The Trends and Status of LBAP Moth Species Requiring Trapping at Specific Sites in the Yorkshire Dales National Park in 2016

Species	Latin name	% change in Yorks in 2016	Yorkshire status	YDNP population	YDNP status	YDNP 2016
Forester	<i>Adscita statices</i>	Numbers too small	Scattered local populations	One population, stable	Stable	Population at Ballowfields in unchanged. Pheromones tried this year with no success at all
Barred Tooth-striped	<i>Trichopteryx polycommata</i>	Numbers too small	One population at grass wood	One population, stable	Stable	Several records from the only site at Grass Wood

Other endangered species in the YDNP

Table 4. The Trends and Status of Other Endangered Moth Species in the Yorkshire Dales National Park in 2016

Species	Latin Name	% change in Yorks in 2016	Yorkshire status	YDNP population status	YDNP status	YDNP 2016
Cistus Forester	<i>Adscita geryon</i>	Numbers too small	Two populations - dales and ny moors	Local	Stable	Just recorded from Kilnsey but very healthy numbers here
Yellow-ringed Carpet	<i>Entephria flavicinctata</i>	Numbers too small	Very rare	Very rare	Too few records to assess	Again no records this year
Chestnut-coloured Carpet	<i>Thera cognata</i>	Numbers too small	Very rare	Very rare	Too few records to assess	Found again in Ingleborough area where the junipers are not healthy so population is vulnerable
Beech-green Carpet	<i>Colostygia olivata</i>	Numbers too small	Very local and infrequently reported	Local	Too few records to assess	One at Ingleborough is first since 2013. Very local or existing at a very low density
Small Argent & Sable	<i>Epirrhoe tristata</i>	Numbers too small	Local in upland areas	Local	Too few records to assess	Records from Nidderdale AONB as usual but none in YDNP where it is very uncommon
Tissue	<i>Triphosa dubitata</i>	Numbers too small	Local	Local	Stable	366 over-wintering in main cave in Littondale is encouraging
Barred Carpet	<i>Perizoma taeniata</i>	Numbers too small	Very rare	Very rare	Probably stable	Three at grass wood in august - it's only known site in the dales
Heath Rivulet	<i>Perizoma minorata</i>	Numbers too small	Very rare	Very rare	Too few records to assess	One at sleet gill, Littondale is a new site. This and grass wood are the only current English sites for this moth
Valerian Pug	<i>Eupithecia valerianata</i>	Numbers too small	Local	Local	Too few records to assess	Remains very local and no records this year from the dales. Last seen at Malham in 2013

Species	Latin Name	% change in Yorks in 2016	Yorkshire status	YDNP population status	YDNP status	YDNP 2016
Thyme Pug	<i>Eupithecia distinctaria</i>	Numbers too small	Rare	Very local	Too few records to assess	No records in 2016. Very local with few records but our small population is important
Manchester Treble-bar	<i>Carsia sororiata</i>	Numbers too small	Rare	Rare	Too few records to assess	No records in the county in 2016. Only one YDNP record in 1997
Annulet	<i>Charissa obscurata</i>	Numbers too small	Local on coast, rare inland	?Still present	?Absent	Old records from grass wood/dib scar but not seen since 1991. One at Settle just outside the YDNP boundary in 2014.
Alder Kitten	<i>Furcula bicuspis</i>	Numbers too small	Rare	?Present	?Absent	One at Skipton in 2016 was again just outside the boundary. No YDNP records but it might be present
Least Minor	<i>Photedes captiuncula</i>	Numbers too small	Very rare	Very local	Too few records to assess	After a blank in 2015, good to see three at dib scar
Marsh Oblique-barred	<i>Hyphenodes humidalis</i>	Numbers too small	Rare	?Still present	?Absent	Old records from malham but not since 1960s. Rediscovered outside park boundary at Austwick in 2011

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