

Nature in the Dales:

2020 vision

The second Biodiversity Action Plan for the
Yorkshire Dales National Park

Combined Invertebrate Species Action Plans

Yorkshire Dales Biodiversity Forum, 2011
Amended Feb 2015

COMBINED INVERTEBRATE SPECIES ACTION PLANS

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CATERPILLAR-HUNTER *Calosoma inquisitor* SPECIES ACTION PLAN

TRENDS & STATUS 2011

Population in Britain	NBN list c. 50 sites
Population in the YDNP	Present at 4 sites
Conservation Status in UK	Marked decline (JNCC)
Conservation Status in Europe	Not threatened
Current national population trend	Decline
Current YDNP trend	Unknown

UK BIODIVERSITY TARGETS 2011

UK BAP Targets	Priority Actions for YDNP LBAP
Autecological research to properly define the species requirements.	No
Manage its current sites appropriately.	Yes
Based on autecological findings undertake a wider survey focusing on sites from which it has been recorded in the past.	No

**NATURE IN THE DALES: 2020 VISION
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objective

LS1: To establish a monitoring programme for lesser searcher by end of 2016.

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
LS1.1: Establish baseline population & trend monitoring by promoting recording of Lesser Searcher.	Monitoring programme	Biodiversity Forum	% of LBAP species that are stable or increasing

Milestones

Actions	Target	When?
LS1.1: Establish baseline population & trend monitoring by promoting recording of Lesser Searcher.	Devise monitoring programme	2016

VIOLET OIL-BEETLE *Meloe violaceus* SPECIES ACTION PLAN

TRENDS & STATUS 2011

Population in Britain	Unknown
Population in the YDNP	One site
Conservation Status in UK	Not threatened
Conservation Status in Europe	Not threatened
Current national population trend	Unknown
Current YDNP trend	Unknown

UK BIODIVERSITY TARGETS 2011

UK BAP Targets	Priority Actions for YDNP LBAP
Implement targeted site management on suitable unimproved habitat where this is in close vicinity to known oil beetle populations.	Yes
Autecological work to determine the species requirements.	No
Further work to determine status.	Yes

**NATURE IN THE DALES-2020 VISION:
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objective

VO1: To determine whether there is an extant population of violet oil beetle in the YDNP by end of 2016

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
VO1.1: Establish whether there is an extant population of Violet Oil Beetle.	Survey	Biodiversity Forum	n/a

Milestones

Actions	Target	When?
VO1.1: Re-survey known site.	Report	2016

BUTTERFLY SPECIES ACTION PLANS

TRENDS & STATUS 2011

NORTHERN BROWN ARGUS *Aricia artaxerxes*

Population in Britain	Restricted to northern England and Scotland
Population in the YDNP	42 colonies in 2007
Conservation Status in UK	Butterfly Conservation priority: high
Conservation Status in Europe	Not threatened
Current national population trend	Range decline in south
Current YDNP trend	Stable

SMALL PEARL-BORDERED FRITILLARY *Boloria selene*

Population in Britain	Widespread across upland and western Britain
Population in the YDNP	Nine colonies in 2007
Conservation Status in UK	Butterfly Conservation priority: high
Conservation Status in Europe	Not threatened
Current national population trend	Range decline in England
Current YDNP trend	Stable

SMALL HEATH *Coenonympha pamphilus*

Population in Britain	Widespread in Britain and Ireland
Population in the YDNP	Widespread
Conservation Status in UK	Butterfly Conservation priority: high
Conservation Status in Europe	Not threatened
Current national population trend	Range stable
Current YDNP trend	Stable

WALL *Lasiommata megera*

Population in Britain	Found in northern and western Britain
Population in the YDNP	Restricted distribution
Conservation Status in UK	Butterfly Conservation priority: high
Conservation Status in Europe	Not threatened
Current national population trend	Slight spread in northern England
Current YDNP trend	Unknown

WHITE LETTER HAIRSTREAK *Satyrium w-album*

Population in Britain	Range expanding in some areas after major decline
Population in the YDNP	Probably under recorded, recent records from six 1km x 1km squares
Conservation Status in UK	Butterfly Conservation priority: high
Conservation Status in Europe	Not threatened
Current national population trend	Possible increase?
Current YDNP trend	Unknown

UK BIODIVERSITY TARGETS 2011

UK BAP Targets	Priority Actions for YDNP LBAP
NORTHERN BROWN ARGUS: Ensure that grazing of upland limestone grasslands is not too intensive.	Yes
SMALL HEATH, WALL: Research into the rapid decline of this widespread species urgently required.	No
SMALL PEARL-BORDERED FRITILLARY: Ensure known sites are managed appropriately (woodlands including coppicing and ride mg) moorland, marshland, damp grassland, limestone grassland, cliff systems and open deciduous woodland and sometimes amongst established bracken stands were appropriate, light grazing is essential).	Yes
SMALL PEARL-BORDERED FRITILLARY: Agri-env schemes suitably tailored to suit the specific requirements; based on grazing and bracken management.	Yes
SMALL PEARL-BORDERED FRITILLARY: EWGS (based on regular rotational ride/ glade maintenance, or a suitable coppicing regime).	No
WHITE LETTER HAIRSTREAK: Ensure the planting of Dutch Elm disease resistant Elm in the English countryside.	No
WHITE LETTER HAIRSTREAK: Ensure current management of remaining sites is appropriate (retaining elm trees, coppicing suckering elm on a 10 year cycle, sensitive hedgerow management).	No
ALL SPECIES: Improved delivery of agri-environment schemes, targeting etc.	No
ALL SPECIES: Encourage monitoring at key sites, co-ordinate data and produce trend for UK and national Indicators.	Yes

**NATURE IN THE DALES: 2020 VISION
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objectives

BUT1: Maintain Northern Brown Argus colonies in appropriate management.

BUT2: Maintain Small Pearl-bordered Fritillary colonies in appropriate management by 2020.

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
BUT1.1 & 2: Assess whether Northern Brown Argus and Small Pearl-bordered Fritillary colony sites are in appropriate management.	Targeted assessment	Yorkshire Dales Butterfly and Moth Forum	None
BUT3.1: Monitor population trends of LBAP priority species.	Monitoring transects	Yorkshire Dales Butterfly and Moth Forum	% of LBAP species that are stable or increasing

Nature in the Dales: 2020 Vision

Milestones

Actions	Target	When?
BUT1.1 & 2: Assess whether Northern Brown Argus and Small Pearl-bordered Fritillary colony sites are in appropriate management.	Report	Achieved 2013. Repeat by 2020
BUT3.1: Continue with monitoring program for Northern Brown Argus, Small Pearl-bordered Fritillary and Small Heath.	Annual report	Ongoing

NORTHERN YELLOW SPLINTER FLY *Lipsothrix errans* SPECIES ACTION PLAN

TRENDS & STATUS 2011

Population in Britain	Widely distributed
Population in the YDNP	One site
Conservation Status in UK	Nationally Scarce.
Conservation Status in Europe	Unknown
Current national population trend	Unknown
Current YDNP trend	Unknown

UK BIODIVERSITY TARGETS 2011

UK BAP Targets	Priority Actions for YDNP LBAP
Ensure sufficient continuity of breeding habitat, i.e. wet, decaying wood (3-10 cm diameter) partially immersed. Ensure sufficient recruitment of native broad-leaved trees.	No
Prepare management plan for known sites and include species and its requirements.	No
Prevent clearance of damp woods, of fallen timber in woodland streams / seepages and water pollution. Remove non-native tree and shrubs (such as conifers and sycamore).	No
Avoid felling damaged or hazardous trees – use tree surgery if possible. Avoid removal of coarse woody debris from watercourses (removal for flood purposes might only need be concentrated in restricted parts of the channel. River woodlands are likely to be of considerable importance in reducing damage during spates by holding back flood-water and this should be recognised. Coarse woody debris should not be cleared to enable fish migration – there is little evidence that natural log jams hinder fish movement – the positive benefits of debris dams for example in providing cover for young fish and stabilising banks are more likely to outweigh any disadvantages. Avoid regulation of watercourses – these are unlikely to support <i>Lipsothrix</i> species. Retain natural riparian features such as shingle bars, natural cliffs, waterfalls, riffles and pools, etc – river engineering is likely to destroy or damage the value of the river for <i>Lipsothrix</i> species. Coppicing is unlikely to provide woody debris of a sufficient size and if it is carried-out it should not be done throughout the whole wood and standard trees should be included.	No
Survey is needed to find any new sites, monitoring is needed to understand the status of the species at existing sites. This data is needed to allow reporting against success criteria. <i>Lipsothrix</i> species do not appear to have been recorded from Northern-Ireland and surveys should be conducted here.	Yes
Preparation of key to early stages (this has been partly done but separation of <i>nervosa</i> and <i>errans</i> needs more work). More work on habitat parameters and the specific ecological requirements of the different <i>Lipsothrix</i> species needs to be done. Promote importance of coarse woody debris in streams and rivers by publication of papers, leaflets etc in relevant journals for woodland management and development (a leaflet by Staffordshire Wildlife Trust promoting coarse woody debris has already been done). This information needs to be made available to managers of woodlands and woodland streams.	No

**NATURE IN THE DALES: 2020 VISION
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objective

NYS1: To determine whether there is an extant population of yellow splinter in the YDNP by end of 2016.

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
NYS1.1: Determine the presence of Northern Yellow Splinter at the one known site.	Targeted survey	Yorkshire Naturalists' Union	None

Milestones

Actions	Target	When?
NYS1.1: Determine the presence of Northern Yellow Splinter at the one known site.	Report	2016

MOTH SPECIES ACTION PLANS

STATUS 2011

Species	Population in Dales
Grey Dagger <i>Acronicta psi</i>	Common
Knot Grass <i>Acronicta rumicis</i>	Common
The Forester <i>Adscita statices</i>	One Site
Brown-spot Pinion <i>Agrochola litura</i>	Unknown
Ear Moth <i>Amphipoea oculea</i>	Unknown
Dusky Brocade <i>Apamea remissa</i>	Common
Deep-brown Dart <i>Aporophyla lutulenta</i>	Unknown
Green-brindled Crescent <i>Allophyes oxyacanthae</i>	Common
Garden Tiger <i>Arctia caja</i>	Unknown
The Sprawler <i>Asteroscopus sphinx</i>	Unknown
Centre-barred Sallow <i>Atethmia centrago</i>	Unknown
Dark Brocade <i>Blepharita adusta</i>	Unknown
Mottled Rustic <i>Caradrina morpheus</i>	Unknown
Haworth's Minor <i>Celaena haworthii</i>	Very common
The Crescent <i>Celaena leucostigma</i>	Unknown
Oak Lutestring <i>Cymatophorima diluta</i>	Unknown
Brindled Ochre <i>Dasypolia templi</i>	Unknown
Small Square-spot <i>Diarsia rubi</i>	Unknown
Figure Of Eight <i>Diloba caeruleocephala</i>	Common
Small Phoenix <i>Ecliptopera silaceata</i>	Common
September Thorn <i>Ennomos erosaria</i>	Rare
Grey Mountain Carpet <i>Entephria caesiata</i>	Abundant on moors
Galium Carpet <i>Epirrhoe galiata</i>	Unknown
Autumnal Rustic <i>Eugnorisma glareosa</i>	Unknown
The Spinach <i>Eulithis mellinata</i>	Common
Garden Dart <i>Euxoa nigricans</i>	Unknown
Double Dart <i>Graphiphora augur</i>	Unknown
Ghost Moth <i>Hepialus humuli</i>	Common
Rosy Rustic <i>Hydraecia micacea</i>	Common
Dot Moth <i>Melanchra persicariae</i>	Common
Rosy Minor <i>Mesoligia literosa</i>	Unknown
Powdered Quaker <i>Orthosia gracilis</i>	Unknown
Dark Spinach <i>Pelurga comitata</i>	Unknown
Grass Rivulet <i>Perizoma albulata</i> subsp. <i>albulata</i>	Unknown
Large Wainscot <i>Rhizedra lutosa</i>	Unknown
Shaded Broad-bar <i>Scotopteryx chenopodiata</i>	Unknown
White Ermine <i>Spilosoma lubricipeda</i>	Very common
Buff Ermine <i>Spilosoma luteum</i>	Very common
The Anomalous <i>Stilbia anomala</i>	Unknown
Hedge Rustic <i>Tholera cespitis</i>	Unknown
Barred Tooth-striped <i>Trichopteryx polycommata</i>	Unknown
The Cinnabar <i>Tyria jacobaeae</i>	Unknown
Oak Hook-tip <i>Watsonalla binaria</i>	Unknown
The Sallow <i>Xanthia icteritia</i>	Unknown
Dark-barred Twin-spot Carpet <i>Xanthorhoe ferrugata</i>	Widespread
Heath Rustic <i>Xestia agathina</i>	Scarce

UK BIODIVERSITY TARGETS 2011

National BAP Actions	Priority Actions for YDNP LBAP
Ensure moths adequately covered by agri-environment schemes and by other wider countryside policies, e.g. forestry, brownfields. The key pressures are: agricultural intensification; habitat fragmentation; inappropriate and inconsistent management, i.e. excessive tidying such as hedge flailing, use of pesticides, herbicides and fertilisers, climate change and possibly light pollution.	No
THE FORESTER: Need to gain a better understanding of autecology.	No
THE FORESTER: Need to encourage survey to gain a better understanding of distribution. Need to identify key sites and monitor these.	Yes
THE FORESTER: Some sites possibly have grazing issues, others scrub management, but also research will influence this. Advice is likely to be needed to maintain continuity and enhance amount of suitable habitat.	No
Investigate the effects of land use policy and management, such as agri-environment schemes, forestry practices, hedgerow management, and land use policies and practices within the urban and brownfield environments on suites of species within this group of moths. Investigate the effects of light pollution on moth populations. Investigate the effects of climate change on moth populations. Investigate the effects of eutrophication on moth populations. Investigate the international status of these species.	No
The National Macro-moth Recording Scheme and Rothamsted Insect Survey should be supported and resourced to provide trend data for these widespread but declining species, so that success criteria and targets can be reported against.	Yes
This species should be part of a grouped action plan that investigates the causes of decline of widespread moth species. The grouped plan would serve 69 of the BAP listed moths.	No

**NATURE IN THE DALES: 2020 VISION
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objective

- MO1.1:** To improve monitoring by increasing the number of records submitted annually to the National Macro-moth Recording Scheme by 2016.
- MO1.2:** To determine the distribution of Forester moth in areas around the known site.

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
MO1.1: To continue to increase the number of records submitted annually to the National Macro-moth Recording Scheme	National Macro-moth Recording Scheme	Yorkshire Dales Butterfly and Moth Forum	None
MO1.2: Need to encourage further survey to gain a better understanding of distribution of Forester adjacent to only known site.	Targeted survey work	Yorkshire Dales Butterfly and Moth Forum	Report

Milestones

Actions	Target	When?
MO1.1: Determine which species can be effectively monitored by increasing the number of records submitted to the National Macro-moth recording scheme.	Report	2016
MO1.2: Need to encourage further survey to gain a better understanding of distribution of Forester adjacent to only known site.	Report	2016

MONEY SPIDER SPECIES ACTION PLANS

TRENDS & STATUS 2011

Broad Groove-head Spider *Monocephalus castaneipes*

Population in Britain	Present in 82 10 km squares (JNCC)
Population in the YDNP	Present in seven 10km squares
Conservation Status in UK	Not threatened
Conservation Status in Europe	Not threatened
Current national population trend	Unknown
Current YDNP trend	Unknown

Cloud-living Spider *Semljicola caliginosus*

Population in Britain	Endemic to Cumbria, Yorkshire and the Scottish Highlands
Population in the YDNP	Records from five sites
Conservation Status in UK	Threatened
Conservation Status in Europe	Not applicable
Current national population trend	Unknown
Current YDNP trend	Unknown

UK BIODIVERSITY TARGETS 2011

UK BAP Targets	Priority Actions for YDNP LBAP
Survey is needed to find any new sites. Monitoring is needed to understand the status of the species at existing sites. These data are needed to allow reporting against success criteria.	Yes
<i>Monocephalus castaneipes</i> : A re-survey of the upland sites might offset the notion of decline, as it may just be poorly recorded at altitude, as many species are.	Yes
<i>Semljicola caliginosus</i> : Active upland survey programme at its recorded sites, to offset the notion it is but poorly recorded now, then review.	Yes

**NATURE IN THE DALES: 2020 VISION
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objective

- MS1:** Revisit sites surveyed in 2013 to determine status of Broad Groove-head Spider *Monocephalus castaneipes* by 2020
- MS 2.2.** Repeat baseline survey to determine status of *Semljicola caliginosus* by 2020

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
MS1.1: To undertake repeat monitoring to determine the status of <i>Monocephalus castaneipes</i> and <i>Semljicola caliginosus</i> .	Targeted survey	Biodiversity Forum	% of LBAP species that are stable or increasing

Milestones

Actions	Target	When?
MS1.1: To repeat monitoring programme for <i>Monocephalus castaneipes</i> and <i>Semljicola caliginosus</i> .	Report	2020

MOLLUSCA SPECIES ACTION PLANS

ROUND-MOUTHED WHORL SNAIL *Vertigo genesii* SPECIES ACTION PLAN

TRENDS & STATUS 2011

Population in Britain	23 occupied 1-km squares
Population in the YDNP	Present at one sites
Conservation Status in UK	Stable
Conservation Status in Europe	Not threatened
Current national population trend	Stable
Current YDNP trend	Unknown

UK BIODIVERSITY TARGETS 2011

UK BAP Targets	Priority Actions for YDNP LBAP
Wider countryside measures to maintain water flow and unpolluted waters in occupied flushes are essential to maintain populations of this species. <i>V. genesii</i> occupies a botanically rich habitat (calcareous seepages) that is generally of high conservation value. It is likely that the conservation of this species is well-served by general habitat management that seeks to maintain open, botanically diverse seepages. Threats include: modification of site hydrology, heavy grazing, lack of grazing, supplementary feeding of livestock, scrub encroachment, eutrophication, herbicides, pesticides, trampling.	No
Monitoring is needed to understand the status of the species at existing, previously surveyed and monitored sites. These data are needed to allow reporting against success criteria.	Yes
Research: further genetical studies (DNA) to clarify taxonomic position of this species in relation to very closely related <i>Vertigo geyeri</i> .	No
Survey (suitable targeted) is needed to find any new sites in un-surveyed upland base-rich flushes in north-eastern Scotland and north Pennines.	Yes

**NATURE IN THE DALES: 2020 VISION
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objective

RMWS1.1: To continue monitoring programme for round-mouthed whorl snail.

RMWS1.2: To identify potential new sites and undertake baseline survey for round-mouthed whorl by 2016.

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
RMWS1.1: To continue monitoring programme for round-mouthed whorl snail.	Monitoring programme	Biodiversity Forum	% of LBAP species that are stable or increasing
RMWS1.2: To identify potential new sites and undertake baseline survey for round-mouthed whorl by 2020.	Report	Biodiversity Forum	None

Milestones

Actions	Target	When?
RMWS1.1: To continue monitoring programme for round-mouthed whorl snail.	Devise monitoring programme	2016
RMWS1.2: To identify potential new sites and undertake baseline survey for round-mouthed whorl by 2020	Report	2020

FINE-LINED PEA MUSSEL *Pisidium tenuilineatum* SPECIES ACTION PLAN

TRENDS & STATUS 2011

Population in Britain	Records from 23 10km squares between 1965-1999
Population in the YDNP	Present in the Wharfe
Conservation Status in UK	Probably declining
Conservation Status in Europe	Not known
Current national population trend	Decline
Current YDNP trend	Not known

UK BIODIVERSITY TARGETS 2011

UK BAP Targets	Priority Actions for YDNP LBAP
Review the data for this species to assess direction of action.	No

**NATURE IN THE DALES-2020 VISION:
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objective

FLPM1: To continue monitoring programme for fine-lined pea mussel by end of 2020.

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
FLPM1.1: To continue monitoring the fine-lined pea mussel population.	Monitoring programme	Biodiversity Forum	% of LBAP species that are stable or increasing

Milestones

Actions	Target	When?
LPM1.1: : To continue monitoring the fine-lined pea mussel population.	Monitoring programme	2020

WHITE-CLAWED CRAYFISH *Austropotamobius pallipes* SPECIES ACTION PLAN

TRENDS & STATUS

Population in Britain	Currently undetermined
Population in the YDNP	Formerly widespread
Conservation Status in UK	Globally endangered
Conservation Status in Europe	Globally endangered
Current national population trend	Declining
Current YDNP trend	Declining

UK BIODIVERSITY TARGETS 2011

UK BAP Targets	Priority Actions for YDNP LBAP
Merging of all distribution, ark site, and control data into one place, available to all workers.	No
Discovery and utilisation of ark sites as native crayfish refuges, following established protocols.	No

**NATURE IN THE DALES-2020 VISION:
OBJECTIVES, ACTIONS, TARGETS & MILESTONES**

Objective

WCC1: Assess potential for ark sites in YDNP by 2020.

Actions & Targets

Actions	Main Delivery Mechanism	Lead Organisation	Indicator
WCC1: Assess potential for ark sites in YDNP by 2020.	Assessment	Biodiversity Forum	Report

Milestones

Actions	Target	When?
WCC1: Assess potential for ark sites in YDNP by 2020.	Report	2020

Nature in the Dales: 2020 Vision

Nature in the Dales: 2020 Vision was written and co-ordinated by Tim Thom, Ian Court, Frances Graham & Hannah Fawcett of the Yorkshire Dales National Park Authority in 2011, following consultation. The production of the plan was steered, advised and supported by the Yorkshire Dales Biodiversity Forum who will be responsible for ensuring that the actions and targets in *Nature in the Dales: 2020 Vision* are achieved. Minor revisions made Feb 2015.

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