Nature in the Dales: 2020 vision

The second Biodiversity Action Plan for the Yorkshire Dales National Park

Summary

Yorkshire Dales Biodiversity Forum, 2011

www.natureinthedales.org.uk

FOREWORD

For the last ten years *Nature in the Dales - a Local Biodiversity Action Plan for the Yorkshire Dales National Park* has guided many organisations, local groups and individuals in working hard to look after the unique natural environment of this special place. From the high profile to the low key, we have all been working to conserve, enhance and protect key habitats and species. A lot of this work has taken place through collaborative projects, from regional partnerships to local community-led schemes. Together, we have successfully implemented actions set out in the biodiversity action plan leading to major positive changes for target species and habitats.

However, we all recognise that there is still much work to be done if we are to secure a biodiversity-rich future. *Nature in the Dales: 2020 Vision* sets out an ambitious but achievable programme of action for the coming decade aiming to conserve and enhance our biodiversity resource. Presented as a comprehensive, user-friendly on-line tool, the biodiversity action plan enables all people who share a passion for nature conservation in the Dales to come together and make a difference.

Our plan takes the national priorities from the UK biodiversity action plan and translates them into practical actions at a local level. It is an inspiring document allowing each reader to see what action they can take to promote biodiversity.

Now is the time for all people with a passion for the Yorkshire Dales, be they conservationists, farmers, foresters or game-keepers, to play their part in protecting and enhancing our precious natural heritage for the benefit of all. Will you be a part of achieving 2020 Vision?

Gordon Haycock, Chair, Yorkshire Dales Biodiversity Forum

Nature in the Dales: 2020 Vision was written and co-ordinated by Tim Thom, Ian Court & Frances Graham 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.

For citation purposes please use the following format:
Yorkshire Dales Biodiversity Forum, 2011. *Nature in the Dales: 2020 Vision*, Local Biodiversity Action Plan.

Contact: **wildlifeconservation@yorkshiredales.org.uk**

NATURE IN THE DALES: 2020 VISION

CONTENTS

EXECUTIVE SUMMARY
A. BACKGROUND
B. IMPLEMENTING THE ENGLAND BIODIVERSITY STRATEGY IN THE YORKSHIRE DALES NATIONAL PARK
C. THE HABITATS
D. THE SPECIES
APPENDIX 1: UK, ENGLAND AND YORKSHIRE & HUMBER BIODIVERSITY CONSERVATION POLICY
APPENDIX 2: RELATIONSHIP BETWEEN *NATURE IN THE DALES* (2000-2010), THE UK BIODIVERSITY ACTION PLAN AND *NATURE IN THE DALES: 2020* VISION PRIORITY HABITATS
APPENDIX 3: EXTENT & CONDITION OF PRIORITY HABITATS IN THE YORKSHIRE DALES NATIONAL PARK IN 2010
APPENDIX 4: DISTRIBUTION & STATUS OF PRIORITY SPECIES IN THE YORKSHIRE DALES NATIONAL PARK IN 2010

Please note that the detailed Habitat and Species Action Plans are not included in this summary document and are available separately from:
http://www.natureinthedales.org.uk/lbap2.htm

EXECUTIVE SUMMARY

Nature in the Dales: 2020 Vision has been produced by the Yorkshire Dales Biodiversity Forum and sets out an action plan for the implementation of the England Biodiversity Strategy within the Yorkshire Dales National Park (YDNP).

1. AIMS AND PRINCIPLES

The overall aim of *Nature in the Dales: 2020 Vision* is:

To contribute to the delivery of the England Biodiversity Strategy by conserving and, where appropriate, enhancing biodiversity within the Yorkshire Dales National Park through all appropriate mechanisms.

To achieve this aim *Nature in the Dales: 2020 Vision* has two primary objectives:

To get 95% of the area of priority habitats in the Yorkshire Dales National Park into "good" condition by 2020.

To get 95% of the populations of priority species in the Yorkshire Dales National Park into a stable or increasing condition by 2020.

These aims will be underpinned by the following principles which match those of the United Kingdom Biodiversity Action Plan (UKBAP) and the England Biodiversity Strategy:

- ***Helping biodiversity respond to climate change.***
- ***Reducing the risks and damage caused by invasive non-native species.***
- ***Providing spatial frameworks for landscape-scale habitat restoration.***
- ***Protecting the best sites for wildlife.***
- ***Targeting action on priority species and habitats.***
- ***Embedding proper consideration of biodiversity and ecosystem services in all relevant sectors of policy and decision-making.***
- ***Engaging people, and encouraging behaviour change.***
- ***Developing and interpreting the evidence base.***

The following over-arching actions will be developed:

1.1 Helping biodiversity to respond to climate change:

- ***Conserving existing biodiversity.***
- ***Reducing sources of harm not linked to climate change.***

- ***Developing ecologically resilient and varied landscapes.***

- ***Establishing ecological networks through habitat protection, restoration and creation.***

- ***Making sound decisions based on analysis.***

- ***Integrating adaptation and mitigation measures into conservation management, planning and practice.***

  - *Incorporating a climate change adaptation plan into the 2012-2017 Yorkshire Dales National Park Management Plan (YDNPMP).*

  - *Implementing mitigation projects based on peat restoration and woodland creation.*

  - *Ensuring Environmental Stewardship is reviewed and updated to take account of management for climate change.*

  - *Increasing the dialogue with land managers to assess the implications of climate change on land management practices.*

1.2 Reducing the risks and damage caused by invasive non-native species:

- ***Complete the Yorkshire Dales National Park Authority's (YDNPA) non-native invasive species review by Dec 2010.***

1.3 Providing spatial frameworks for landscape-scale habitat restoration:

- ***Complete the YDNP "Biodiversity Network Map" by March 2011 and review its implications for Nature in the Dales: 2020 Vision by the end of 2011.***

1.4 Protecting the best sites for wildlife:

- ***Agricultural practice and support systems.***

  - *Continuing to provide support through the Environmental Stewardship Higher Level Scheme (HLS) and Woodland Grant Schemes (WGS) to encourage farmers and land managers to manage the land as much for landscape and wildlife as for livestock production.*

  - *Maintaining some basic environmental standards through Cross-compliance and the Environmental Stewardship Entry Level Scheme (ELS) to prevent further loss of biodiversity.*

  - *Continuing to encourage the development of a more sustainable farming industry with levels of grazing linked to the environmental carrying capacity of the land and balanced mixed farming systems using support from Environmental Stewardship and targeted demonstration programmes such as the Limestone Country Project.*

- *Providing support for the rural economy by helping farmers to develop higher value markets and other rural businesses which are compatible with maintaining biodiversity in the National Park.*

- ***Grouse moor management***

  - *Targeting of funds to assist moorland owners to block grips, restore peatlands, and reduce grazing levels and plant gill woodlands.*

  - *Establishing joint forums to discuss and resolve areas of conflict.*

1.5 Targeting action on priority species and habitat:

Sections C and D of this document summarise the process used to select habitats and species respectively and summarises the objectives, actions and targets that have been identified to conserve or enhance them by 2020. Two over-arching principles were applied to the selection of habitats and species for inclusion:

- ***The habitat or species must be one of those listed in the current UK BAP list.***

- ***There must be good evidence that the habitat or species occurred in sufficient amounts in the YDNP and that local actions (as opposed to direct national interventions) would make a difference to their conservation or enhancement.***

1.6 Embedding proper consideration of biodiversity and ecosystem services in all relevant sectors of policy and decision-making:

- ***Integrating Nature in the Dales: 2020 Vision Aims and Objectives into the 2012-2017 Yorkshire Dales National Park Management Plan (YDNPMP).***

1.7 Engaging people, and encouraging behaviour change:

- ***Work with membership based natural history organisations such as the Yorkshire Naturalists Union (YNU) or the Wharfedale Natural History Society (WNHS) together with non-governmental organisations such as the British Trust for Ornithology (BTO) to develop monitoring and recording programmes to improve understanding of the status and population trends of the priority species identified in this plan.***

- ***Through continuation of the Parish Wildlife Project encouraging and supporting local communities to get involved in identifying and managing wildlife projects or sites within their own parishes.***

- ***Through the production of guidance documents available on the YDNPA's website encouraging people engaged in development works***

to incorporate positive biodiversity conservation measures into their plans.

- ***Developing a celebrating biodiversity events programme beginning with the 2020 Vision conference in October 2010.***

- ***Developing a programme to work with other groups such as Wildlife Watch and the John Muir Trust and schools and colleges to engage children and young people in biodiversity activities.***

- ***Continuing to develop the Nature in the Dales website as a hub for information about the biodiversity of the YDNP.***

- ***Prevent the loss of limestone pavement by asking people not to use water-worn limestone in gardening or landscaping design schemes.***

- ***Preventing damage to global peat bogs by asking people not to use peat based products.***

- ***Preventing the loss of native species by competition from non-native invasive species by highlighting which are the problem species and how to avoid releasing them into the wild.***

- ***Engage the existing community of naturalists to help with recording species.***

- ***Encouraging local people and visitors to take part in national and regional public participation wildlife surveying run by organisations such as Royal Society for the Protection of Birds (RSPB), Plantlife or the Yorkshire Naturalists Union (YNU) and to submit their records to the appropriate local or national recording schemes (see Section B.3.7.5)***

- ***Encouraging people with concerns about the state of biodiversity in the National Park to raise these concerns with the relevant elected local and national government representatives or with Members of the National Park Authority and make sure that they raise these concerns at the appropriate forums.***

1.8 Developing and interpreting the evidence base:

- ***Supporting national programmes through implementation of appropriate local monitoring initiatives or by providing logistical assistance to national research and monitoring programmes.***

2. MANAGING THE PROCESS

The implementation of the action plans will be co-ordinated by the Yorkshire Dales Biodiversity Forum (YDBF). A short progress report will be produced each year of the plan. More detailed plan reviews will be carried out every three years (2013, 2016, 2019) to determine whether targets are being achieved and targets updated where necessary.

3. MONITORING PROGRESS ON THE GROUND

Progress towards achieving the aims and objectives outlined in *Nature in the Dales: 2020 Vision* will be reported every 3 years (2013, 2016, 2019) against the following indicators:

Percentage by area of priority habitats in the Yorkshire Dales National Park in "favourable" condition.

(Planned outcomes should be 65% in 2013, 85% in 2016 and 95% in 2019)

Percentage of the populations of priority species in the Yorkshire Dales National Park into a stable or increasing condition.

(Planned outcomes should be 40% in 2013, 80% in 2016 and 95% in 2019)

4. THE HABITATS

Part C of this document details the priority habitats for inclusion in *Nature in the Dales: 2020 Vision*. Seventeen Habitat Action Plans are described. The overall objectives for habitat conservation in *Nature in the Dales: 2020 Vision* are:

1. To get 95% of the area (58,167ha) covered by the existing Local Biodiversity Action Plan (LBAP) priority habitats listed in Table C.2 in "good" condition by 2020.

2. To move 25% (6188ha) of SSSI LBAP Habitats in Unfavourable-Recovering Condition to Favourable Condition by 2020.

3. To create 420ha of new LBAP habitat as listed in Table C.3 by 2020.

4. To achieve "favourable" condition of Malham Tarn & Semerwater by 2016.

5. To determine the extent and condition of the existing LBAP priority habitats listed in Table C.4 by 2013.

5. THE SPECIES

Part D of this document details the priority species for inclusion in *Nature in the Dales: 2020 Vision*. 139 UKBAP species were identified for consideration. 129 species were considered to be priorities. Actions for 39 of these species are partially or completely covered by Habitat Action Plans (HAP). 28 individual or grouped Species Action Plans (SAP) have been produced for those 122 species requiring actions in addition to habitat management.

For two species there was insufficient information on their distribution or status for any detailed objectives or targets to be produced so these have been excluded until sufficient information becomes available. For a further eight priority species known to occur in the YDNP there are no UK BAP actions listed that could be carried out locally within the YDNP so these have also been excluded.

The overall objective for species conservation in *Nature in the Dales: 2020 Vision* is:

To get 95% of the populations of priority species into a stable or increasing condition by 2020.

A. BACKGROUND

A.1 WHAT IS BIODIVERSITY?

Biodiversity is the variety of life on Earth. It is the interaction between all living things and their environment. From bacteria to elephants all are part of the complex web of life that is biodiversity. Even human beings are part of the Earth's biodiversity.

A.2 WHY DO WE NEED TO CONSERVE BIODIVERSITY?

The rich diversity of life on this planet must be maintained for its own right as a vital element in the continued evolution of life on Earth. Biodiversity is also fundamentally important to humans for their quality of life. Humans depend on biodiversity for their natural resources, their cultural heritage, a source of wonder, spiritual enrichment and pleasure, and as an economic resource to many. Biodiversity is also the investment account for future generations that may have different needs and requirements from their natural world.

Many areas of the YDNP are of national and international biodiversity importance being found in only a few locations in the world. In recent times, however, there has been an unprecedented loss of wildlife and natural areas on a global scale as a result of human activities and the YDNP has been no exception.

A.3 HOW HAS BIODIVERSITY CONSERVATION BEEN ORGANISED UP TO NOW?

Appendix 1 provides a summary of the history of biodiversity policy in the UK, the Yorkshire & Humber Region and the YDNP since the Earth Summit in Rio de Janeiro in 1992.

B. IMPLEMENTING THE ENGLAND BIODIVERSITY STRATEGY IN THE YORKSHIRE DALES NATIONAL PARK

Since the Earth Summit in 1992 there have been a significant number of policy drivers at all levels many of which overlap. In this section these policy drivers are analysed and summarised to produce a clear set of aims and objectives for the contribution that actions within the YDNP can make to the delivery of the England Biodiversity Strategy.

B.1 WHY DO WE NEED A BIODIVERSITY ACTION PLAN FOR THE YDNP?

Securing Biodiversity - A new framework for delivering priority habitats and species in England (Natural England, 2008) states that:

"Halting biodiversity loss and meeting the challenge of climate change requires landscape-scale approaches that improve habitat connectivity and deliver appropriate networks to meet the present and future needs of species. This requires coordinated delivery at all levels, with strong regional and local biodiversity partnerships and improved integration and alignment of national, regional and local work programmes. This is an important aim of the framework and, to help achieve this, the England Biodiversity Integration Groups and species lead partners will work more closely with regional and local partnerships than has been the case in the past. Within each region, Natural England (NE), the Environment Agency (EA) and the Forestry Commission (FC), will work together with biodiversity partnerships and other key partners, including National Parks and Areas of Outstanding Natural Beauty (AONB), to agree priorities and accountabilities for delivery."

Regional and local biodiversity partnerships are a critical component of the framework, their role is to:

1. *Agree or confirm regional and local targets for delivering priority habitats and species, actively seeking and taking account of advice from the biodiversity integration groups and species lead partners, where appropriate.*

2. *Ensure protected landscapes (National Parks and AONBs) are properly integrated into the prioritisation, decision making and delivery process.*

3. *Ensure targets are fully reflected in appropriate policy instruments and strategies at regional and local levels, including Regional Spatial Strategies, Local Development Documents, Shoreline Management Plans, River Basin Management Plans etc.*

4. *Taking account of any existing 'vision' maps, agree delivery priorities, aiming to enhance biodiversity at a landscape scale and increase the resilience of habitats, sites and ecosystems.*

5. *Develop a regional delivery plan for high priority actions with agreed accountabilities, ensuring that these plans are integrated as far as possible with those of the Biodiversity Integration Groups and the national Targeted Species Recovery process.*

6. *Report actions and their outcomes using the BARS and contribute to national reporting rounds as required.*

This is a clear mandate for local delivery partnerships within the YDNP (in particular the YDBF and the YDNPA) to work together to identify relevant England Biodiversity Strategy objectives and establish an implementation programme within the National Park that contributes to their delivery.

B.2 AIMS AND PRINCIPLES

The overall aim of *Nature in the Dales: 2020 Vision* is:

To contribute to the delivery of the England Biodiversity Strategy by conserving and, where appropriate, enhancing biodiversity within the YDNP through all appropriate mechanisms.

To achieve this aim *Nature in the Dales: 2020 Vision* has two primary objectives:

To get 95% of the area of priority habitats in the YDNP into "good" condition by 2020.

To get 95% of the populations of priority species in the YDNP into a stable or increasing condition by 2020.

These aims will be underpinned by the following principles which match those of the UK BAP and the England Biodiversity Strategy:

- ***Helping biodiversity respond to climate change.***
- ***Reducing the risks and damage caused by invasive non-native species.***
- ***Providing spatial frameworks for landscape-scale habitat restoration.***
- ***Protecting the best sites for wildlife.***
- ***Targeting action on priority species and habitats.***
- ***Embedding proper consideration of biodiversity and ecosystem services in all relevant sectors of policy and decision-making.***
- ***Engaging people, and encouraging behaviour change.***
- ***Developing and interpreting the evidence base.***

B.3 HOW WILL THESE AIMS AND OBJECTIVES BE ACHIEVED?

The principles outlined in section B.2 have been used to identify a series of specific actions and targets as follows.

B.3.1 Helping biodiversity to respond to climate change:

In 2007 The UK Biodiversity Partnership produced the report Conserving Biodiversity in a Changing Climate (Hopkins *et al*. 2007) which set out 6 guiding principles which have been used to develop a set of climate change adaptation actions in *Nature in the Dales: 2020 Vision* as follows:

B.3.1.1 Conserve existing biodiversity:

See Section B.3.4 and B.3.5.

B.3.1.2 Reduce sources of harm not linked to climate:

See Sections B.3.2 to B.3.5.

B.3.1.3 Develop ecologically resilient and varied landscapes:

See Section B.3.3 to B.3.5.

B.3.1.4 Establish ecological networks through habitat protection, restoration and creation:

See Section B.3.3 to B.3.5.

B.3.1.5 Make sound decisions based on analysis:

The response of habitats and species to climate change is the subject of increasing amounts of research and new models of adaptation or loss as a result of climate change are being developed. This research is best coordinated at a national rather than local level. However, as *Nature in the Dales: 2020 Vision* progresses and is reviewed the most up to date understanding of climate change adaptation will be used to inform any changes in the actions and targets within individual species and habitat action plans.

B.3.1.6 Integrate adaptation and mitigation measures into conservation management, planning and practice:

Nature in the Dales: 2020 Vision is not intended to be a static document and will regularly be updated as new information on climate change and its impacts on habitats and species becomes available. There are, however a number of specific actions that should be addressed as follows:

- The 2007-12 YDNPMP currently contains an objective (NC1) to "assess the most likely impacts of climate change on the National Park over the next 15 years, and use this to produce an adaptation plan for managing those impacts." It is essential that this adaptation plan forms part of the 2012 – 2017 YDNPMP.

- *Nature in the Dales: 2020 Vision* includes conservation actions for specific habitats that can contribute directly to climate change mitigation measures and these should be priorities for significant

support. The most notable of these are the restoration of Blanket Bog to conserve peat carbon stores and sequester carbon through new active peat formation and the management and creation of woodland to sequester and store carbon.

- The majority of the targets for habitat conservation in *Nature in the Dales: 2020 Vision* rely on the continued support of agri-environment schemes such as Environmental Stewardship. There is a need to ensure that these are regularly reviewed and updated as new information on the impacts of climate change becomes available.

- The majority of the targets in *Nature in the Dales: 2020 Vision* are dependent on the involvement of the farming and land management communities. There needs to be increasing dialogue with land managers over the implications of climate change on their land management practices and the effect that changes to these may have on biodiversity.

B.3.2 Reducing the risks and damage caused by invasive non-native species:

Invasive non-native species can have serious and damaging effects on other components of biodiversity and social and economic interests. In 2008 the Department for Environment, Food and Rural Affairs (DEFRA) published The Invasive Non-Native Species Framework Strategy for Great Britain (DEFRA, 2008) which sets out a series of actions needed to deal with non-native invasive species. This highlights the need for coordinated action at a national level and an action plan is being developed.

The YDNPA undertook a review of non-native invasive species issues within the National Park during 2010 and the subsequent report was adopted by the Authority in Dec 2010.

B.3.3 Providing spatial frameworks for landscape-scale habitat restoration:

Conserving Biodiversity – the UK approach (DEFRA, 2007) stated that:

"Priority habitats and species cannot be managed in isolation. The conservation of ecosystem structure and functioning, in order to maintain ecosystem services, is a key component of the Ecosystem Approach. In line with this thinking and with the Millennium Ecosystem Assessment approach, we need to consider ecosystems as a whole and how the different components function and depend on one another, especially as these relationships respond to climatic and other environmental changes. The highly fragmented ecosystems typical of much of the UK will be a major constraint for the long-term viability of many species and habitats. Action will, therefore, aim to overcome the fragmentation of priority habitats and to reduce pressures on biodiversity in the wider environment through which species move. These broader, landscape-scale actions are reflected in some of the new targets, such as the targets to increase the patch sizes of grassland habitats and the cross-cutting target to establish landscape-scale complexes for wetlands. New emphasis will be

placed on the delivery of HAPs, both for the ecosystem services they can provide and, where possible, to deliver the needs of species, particularly in making those more resilient to climate change. For some species, dedicated SAPs will continue to be the best focus for action. As distinct ecological units, habitats can be seen in terms of the 'bundles' of products and services that they deliver. However, there may be some functions and services that arise from the combination of habitats in a broader mosaic of land cover types or in distinct topographical units such as catchments. It is important to understand these and ensure that opportunities to create the mix of habitats are taken within a spatial framework, bringing together actions from different habitats and species in a particular targeted area, at the regional level."

This "landscape-scale" approach to biodiversity conservation is currently being adopted by a number of organisations and is leading to a range of different proposals including the Wildlife Trust's Living Landscapes; RSPB's Futurescapes and NE's Integrated Biodiversity Delivery Areas at a national level and Priority Biodiversity Landscape Delivery Areas at a regional level. However, many of the principles behind the landscape-scale approach to biodiversity conservation are already being implemented in the YDNP. In fact, the focus on habitats in delivering species needs was a principle feature of the original *Nature in the Dales* when it was launched in 2000 and this document clearly identified bundles of habitats into landscape units. Whilst many of the new initiatives may bring new insights the YDNP boundary provides an obvious focus for a landscape-scale approach to biodiversity conservation and this lies at the heart of *Nature in the Dales: 2020 Vision*.

However, it is important that a good evidence base underpins any landscape-scale approaches. The YDNPA is working with Forest Research to develop a fine resolution "biodiversity network map" which shows in detail where habitat connections and defragmentation measures would be best targeted and highlights those areas within the National Park which may be the focus of more intensive landscape-scale targeting. This map should be available from March 2011 and will be used to review *Nature in the Dales: 2020 Vision* and to develop specific landscape-scale action from 2011 onwards.

B.3.4 Protecting the best sites for wildlife:

Approximately 30% of the YDNP is designated as a Site of Special Scientific Interest (SSSI). The latest assessment suggests that well over 95% of the SSSI units are in Favourable or Unfavourable-Recovering Condition according to NE's Common Standards Monitoring. This would appear to show that the protection of the best sites for wildlife is working within the YDNP. However, the Unfavourable Recovering category is predominantly a measure of how well we are doing at bringing farmers and land managers into positive management schemes. Clearly, this has been a great success particularly in terms of Natural England's efforts to bring people into agri-environment agreements. However, at the time of writing this plan, the draft Yorkshire Dales National Park Biodiversity Trends & Status Report (YDNPA, in prep.) showed that in 2010 only 20% of the area of priority habitats with data available was in Favourable Condition. The majority of the enclosed farmland habitats were in better condition within SSSIs (e.g. Lowland Hay Meadows 61% Favourable, Upland Hay Meadows 67% Favourable) but unenclosed upland habitats and woodland

were particularly poor (Blanket Bog 8% Favourable, Upland Heathland 31% Favourable, Upland Calcareous Grassland 21% Favourable and Native Woodland 44% Favourable). The clear challenge over the next 10 years is to move more SSSI habitat from Unfavourable to Favourable Condition.

Outside of the SSSI series in the wider countryside the overall picture is even worse with only 47% of the area covered by priority habitats in condition A.

There is clearly more to be done to protect the best wildlife sites in the YDNP and the actions and targets set out in section C and D should help to achieve this. There are, however a number of over-arching issues that need to be addressed in order to implement these actions:

B.3.4.1 Agricultural practice and support systems:

The biodiversity value of hay meadows, species-rich pastures, calcareous grasslands and many other habitats is the result of an agricultural system based around livestock farming at sustainable stocking densities. There is still a need to strengthen the relationship between biodiversity conservation and farming to reverse the declines of recent decades by:

- Continuing to provide support through the Environmental Stewardship Higher Level Scheme and Woodland Grant Schemes to encourage farmers and land managers to manage the land as much for landscape and wildlife as for livestock production.

- Maintaining some basic environmental standards through Cross-compliance and the Environmental Stewardship ELS to prevent further loss of biodiversity.

- Continuing to encourage the development of a more sustainable farming industry with levels of grazing linked to the environmental carrying capacity of the land and balanced mixed farming systems using support from Environmental Stewardship and targeted demonstration programmes such as the Limestone Country Project.

- Providing support for the rural economy by helping farmers to develop higher value markets and other rural businesses which are compatible with maintaining biodiversity in the YDNP.

B.3.4.2 Grouse moor management:

It is widely recognised that the importance of grouse moors to landowners and the resources they have put in to manage them have ensured the survival of heather moorland in the uplands. Well managed grouse moors with their mosaics of heath, scrub and bog are rich with wildlife and support internationally important bird species such as golden plover and merlin. It is essential that moorland owners, farmers and conservation organisations continue to work together to restore the biodiversity value of moorland by:

- Targeting of funds to assist moorland owners to block grips, restore peatlands, reduce grazing levels and plant gill woodlands.

- Establishing joint forums to discuss and resolve areas of conflict.

B.3.5 Targeting action on priority species and habitat

In 2007, the UK Biodiversity Partnership published a new list of priority species and habitats. This contains 1149 species and 65 habitats. This compares to 577 species and 49 habitats under the original UK BAP list, reflecting both continuing declines in some species and better data available as a result of the UK BAP.

The YDBF reviewed these lists to identify which species and habitats should be a focus for action within the YDNP.

Sections C and D of this document summarise the process used to select habitats and species respectively and summarises the objectives, actions and targets that have been identified to conserve or enhance them by 2020. Two over-arching principles were applied to the selection of habitats and species for inclusion:

- **The habitat or species must be one of those listed in the current UK BAP list.**

- **There must be good evidence that the habitat or species occurred in sufficient amounts in the YDNP and that local actions (as opposed to direct national interventions) would make a difference to their conservation or enhancement.**

Full HAPs and SAPs are not provided in this document and can be viewed online at **www.natureinthedales.org.uk**.

B.3.6 Embedding proper consideration of biodiversity and ecosystem services in all relevant sectors of policy and decision-making:

As with the first version of *Nature in the Dales* it is essential that the aims, objectives, actions and targets in *2020 Vision* are integrated in other policy documents covering the YDNP. Members of the YDBF will scrutinise any relevant policy documents over the course of the plan. One of the first opportunities to do this will be in developing the next YDNPMP due for publication in 2012.

B.3.7 Engaging people, and encouraging behaviour change:

Conserving Biodiversity – the UK approach (DEFRA, 2007) stated that:

"Halting the loss of biodiversity has widespread public support and a great deal of biodiversity conservation is achieved by enthusiastic, passionate volunteers. Much work is delivered in partnership particularly through the LBAP mechanism whereby partners such as Local Authorities, Statutory Agencies and NGOs work together to identify and deliver local action for biodiversity, enhancing the

quality and local distinctiveness of local environments as well as contributing to achieving national targets."

For the majority of species in *Nature in the Dales: 2020 Vision* the main action is to develop a more robust baseline population estimate and develop good quality trend monitoring. This is a major challenge and will require much greater involvement of "amateur naturalists". There are a number of individuals who, while not being directly employed by nature conservation organisations, have taxonomic skills that would put many "professionals" to shame. The YDBF will work with membership based natural history organisations such as the YNU or the Wharfedale Natural History Society (WNHS) together with non-governmental organisations such as the British Trust for Ornithology (BTO) to develop monitoring and recording programmes to improve understanding of the status and population trends of the priority species identified in this plan. It is intended to provide a baseline population estimate of the majority of species by December 2013. Monitoring plans will then be developed with a view to reporting on trends in species populations by the end of 2019.

But *Conserving Biodiversity – the UK approach (DEFRA, 2007)* goes further:

"…….*we need to engage more people in taking action to maintain and enhance biodiversity as part of their everyday lives. ……incorporating the need for conservation into communication, education and public awareness programmes. These principles are embodied in the current Breathing Places campaign, being led by the British Broadcasting Company (BBC) to encourage one million more people to take action to make their local environment more wildlife friendly. Audience research commissioned by the BBC suggests that 63% of adults in Great Britain are interested in nature and wildlife and that there are two key triggers for involvement: children and the "local patch". Government and conservation NGOs have commissioned other studies that will inform how best to engage people. The partnership will share this information and its experiences to maximise the effectiveness of its engagement. The key messages will be tailored through communication strategies in each country of the UK and at regional and local levels. These will seek both to present the case for and value of biodiversity conservation and to encourage and aid behavioural change that will benefit biodiversity (in tandem with behaviours aimed at mitigating/adapting to climate change)."*

Conserving Biodiversity – the UK approach (DEFRA, 2007) sets out a series of "Biodiversity Behaviours", which build upon the Breathing Places and other research, and emphasises that all 'doing' should be enjoyable and wherever possible, experiential. These behaviours concur with current thinking on effective practice in communicating biodiversity issues – being **positive**, being **practical** and being **personal**.

These "behaviours" have been used in *Nature in the Dales: 2020 Vision* to develop a series of actions to involve local communities and visitors in biodiversity conservation in the YDNP as follows:

B.3.7.1 Create, or encourage others to create, wildlife friendly spaces – at home, in your local community and through work:

Nature in the Dales: 2020 Vision will develop this behaviour in three ways:

- Encourage local communities and visitors to engage in public participation wildlife surveying and recording (see Section B.3.7.5).
- Through continuation of the Parish Wildlife Project encourage and support local communities to get involved in identifying and managing wildlife projects or sites within their own parishes.
- Through the production of guidance documents available on the YDNPA's website encourage people engaged in development works to incorporate positive biodiversity conservation measures into their plans.

B.3.7.2 Enjoy (and value) your local wildlife friendly space and share this enjoyment with others:

In addition to the actions identified in section B.3.7.2 the YDBF will:

- Develop a celebrating biodiversity events programme beginning with the 2020 Vision conference in October 2010.
- Develop a programme to work with other groups such as Wildlife Watch and the John Muir Trust and schools and colleges to engage children and young people in biodiversity activities.
- Continue to develop the Nature in the Dales website as a hub for information about the biodiversity of the YDNP.

B.3.7.3 Support the work of wildlife conservation organisations:

The primary focus for this behaviour in *Nature in the Dales: 2020 Vision* will be to encourage local communities and visitors to engage in public participation wildlife surveying and recording (see Section B.3.7.5).

B.3.7.4 Think before you buy, for example wildlife-based products or souvenirs from overseas trips; buy wildlife/environmentally-friendly/sustainably-sourced products:

The YDBF will support and promote where possible campaigns to:

- Prevent the loss of limestone pavement by asking people not to use water-worn limestone in gardening or landscaping design schemes.
- Prevent damage to global peat bogs by asking people not to use peat based products.

- Prevent the loss of native species by competition from non-native invasive species by highlighting which are the problem species and how to avoid releasing them into the wild.

B.3.7.5 Record what you see and send results to your Local Records Centre:

In addition to engaging the existing community of naturalists to help with recording species the YDBF will:

- Encourage local people and visitors to take part in national and regional public participation wildlife surveying run by organisations such as RSPB and Plantlife, and to submit their records to the appropriate local or national recording schemes.

B.3.7.6 Exercise your civic duties to ensure those that represent your views reflect your environmental concerns:

The delivery of local government services in the YDNP is covered by numerous parish councils and 4 local authorities – North Yorkshire County Council (NYCC), Craven District Council (CDC), Richmondshire District Council (RDC) and South Lakeland District Council (SLDC). In addition, many of the environmental services and the development control services are provided by the YDNPA. The YDBF will:

- Encourage people with concerns about the state of biodiversity in the National Park to raise these concerns with the relevant elected local and national government representatives or with Members of the YDNPA and make sure that they, in turn, raise these concerns at the appropriate forums.

B.3.8 Developing and interpreting the evidence base:

Conserving Biodiversity – the UK approach (DEFRA, 2007) stated that:

"A sound evidence base is essential to support effective conservation of biodiversity in the UK. Research and associated monitoring is required to:

- *Assess the current status and trends in biodiversity.*
- *Understand the value of biodiversity and ecosystem services.*
- *Understand the reasons for unfavourable status and decline in biodiversity assess future vulnerability and identify effective remedial measures and strategies.*
- *Assess the outcomes and effectiveness of policy.*
- *Innovate in the way we collect, manage and use evidence to support policy and action.*

Understanding ***the current status and trends in biodiversity*** *requires continuing support for, and development of, existing monitoring schemes covering major components of biodiversity such as breeding birds, butterflies, bats and cetaceans, together with periodic habitat surveys and biological recording, as part of a coherent UK monitoring framework and linking to international systems and integrating long-term observations of environmental change. Site condition will remain an important monitoring requirement and innovation may help this to be increasingly integrated with other surveillance activities. Further targeted efforts need to be made to fill knowledge gaps for priority species and habitats. While individual projects will be organised at a range of scales from local to international, to be most effective and efficient, they need to be co-ordinated at a UK level. This understanding will help the UK contribute to targets under the Convention on Biological Diversity and Global Strategy for Plant Conservation to produce working lists, assessments of conservation status and protocols for conservation."*

Clearly, much of this research and monitoring work requires coordination and resources at a national level. However, *Nature in the Dales: 2020 Vision* can support national programmes through implementation of appropriate local monitoring initiatives or by providing logistical assistance to national research and monitoring programmes.

The habitat and species action plans in sections C and D highlight where local research and monitoring programmes will be needed.

B.4 MANAGING THE PROCESS

The action plans outlined in *Nature in the Dales: 2020 Vision* are for ten years from October 2010 to December 2020. The implementation of the action plans will be co-ordinated by the YDBF. A short progress report will be produced each year of the plan. More detailed plan reviews will be carried out every three years (2013, 2016, and 2019) to determine whether targets are being achieved and targets updated where necessary.

B.5 MONITORING PROGRESS ON THE GROUND

Progress towards achieving the aims and objectives outlined in *Nature in the Dales: 2020 Vision* will be reported every three years (2013, 2016, and 2019) against the following indicators:

Percentage by area of priority habitats in the YDNP in "favourable" condition.

(Planned outcomes should be 65% in 2013, 85% in 2016 and 95% in 2019).

Percentage of the populations of priority species in the YDNP in a stable or increasing condition.

(Planned outcomes should be 40% in 2013, 80% in 2016 and 95% in 2019).

C. THE HABITATS

C.1 Habitat Action Plan Selection

The UK BAP and the previous LBAP for the YDNP were analysed to determine which of the UK priority habitats occurred in the National Park in sufficient quantity to merit inclusion in *Nature in the Dales: 2020 Vision* (See Appendix 2). Table C.1 lists those Habitats for which HAPs have been produced. Full copies of each of the HAPs can be viewed online at **www.natureinthedales.org.uk**.

Table C.1 HAPs produced for *Nature in the Dales: 2020 Vision*.

Habitat Action Plan
Limestone Pavement
Lowland Calcareous Grassland
Upland Calcareous Grassland
Inland Rock Outcrops & Scree
Calaminarian Grassland
Blanket Bog
Upland Heathland
Upland Flushes, Fens & Swamps
Upland Hay Meadows
Lowland Meadows
Lowland Raised Bog
Lowland Fens
Native Woodland (includes Upland Mixed Ashwoods, Wet Woodland, Upland Oakwood, Lowland Mixed Deciduous Woodland)
Hedgerows
Rivers
Mesotrophic Lakes
Ponds

C.2 Priority Habitat Extent & Condition in 2010

Using date derived from a number of sources including NE's SSSI Condition Assessment programme and the YDNPA's rolling programme of habitat surveys the extent and condition of a number of the priority habitats in the National Park is presented in Appendix 3.

C.3 *Nature in the Dales: 2020 Vision* Habitat Objectives & Targets

The overall summary for the objectives and targets for implementation of the 17 HAPs in *Nature in the Dales: 2020 Vision* is:

1. To get 95% of the area (58,167ha) covered by the existing LBAP priority habitats listed in Table C.2 in “favourable” condition by 2020.

2. To move 25% (6188ha) of SSSI LBAP Habitats in Unfavourable-Recovering Condition to Favourable Condition by 2020.

3. To create 420ha of new LBAP habitat as listed in Table C3 by 2020.

4. To achieve “favourable” condition of Malham Tarn & Semerwater by 2016.

5. To determine the extent and condition of the existing LBAP priority habitats listed in Table C.4 by 2013.

Table C.2 *2020 Vision* targets for achieving the target of getting 95% of LBAP priority habitats into "good" condition.

Habitat	Existing BAP habitat								
	95% target area (Ha)			Maintain (Ha)			Enhance (Ha)		
	SSSI	Other	Total	SSSI	Other	Total	SSSI	Other	Total
Mesotrophic Lakes	95*	0	95	61	0	61	34	0	34
Limestone Pavement	1310	40	1350	1310	0	1310	0	40	40
Lowland Calcareous Grassland	145	78	223	123	45	168	22	33	55
Upland Calcareous Grassland	3204	2099	5303	2886	1568	4454	318	531	849
Blanket Bog	16025	17056	33081	16025	3832	19857	0	13224	13224
Upland Heathland	9680	2264	11944	9680	360	10040	0	1904	1904
Upland Flushes, Fens & Swamps	747	1645	2392	723	235	958	24	1410	1434
Upland Hay Meadows	210	166	376	210	72	282	0	94	94
Lowland Meadows	394	1078	1472	394	970	1364	0	108	108
Native Woodland	885	1046	1931	835	293	1128	50	753	803
All Habitats	**32,695**	**25,472**	**58,167**	**32,247**	**7375**	**39,622**	**448**	**18,097**	**18,545**

*100% target for Mesotrophic Lakes as enhancement target applies to just one site – Semer Water.

Table C.3 *2020 Vision* targets for the creation of new LBAP habitats.

Habitat	Create new BAP habitat (Ha)
Upland Hay Meadows	20
Native Woodland	400

Table C.4 LBAP habitats where extent and condition are not fully known.

Habitat
Inland Rock Outcrops & Scree
Lowland Raised Bog
Lowland Fens
Hedgerows
Rivers
Ponds
Calaminarian Grassland

Table C.5 Targets for moving 25% of SSSI LBAP Habitats in Unfavourable-Recovering Condition to Favourable Condition by 2020.

Habitat	Target (ha)
Limestone Pavement	260
Lowland Calcareous Grassland	5
Upland Calcareous Grassland	564
Blanket Bog	3484
Upland Heathland	1646
Upland Flushes, Fens & Swamps	107
Upland Hay Meadows	16
Lowland Meadows	72
TOTAL	**6154**

C.4 *Nature in the Dales: 2020 Vision* HAP actions and milestones

The objectives and targets listed in section C.3 will be achieved through a number of actions set out in the full HAPs and summarised in Table C.6. The timetable for delivering these actions has been given as a series of “Milestones” and Table C.7. provides a summary of these.

Table C.6 Summary of the *Nature in the Dales: 2020 Vision* HAP actions.

Habitat	Delivery through agri-environment / woodland grant schemes	Delivery through specific projects	Determine baseline / monitoring
Limestone Pavement	✓	✓	✓
Lowland Calcareous Grassland	✓	-	✓
Upland Calcareous Grassland	✓	-	✓
Inland Rock Outcrops & Scree	-	-	✓
Calaminarian Grassland	✓	✓	✓
Blanket Bog	✓	✓	✓
Upland Heathland	✓	-	✓
Upland Flushes, Fens & Swamps	✓	-	✓
Upland Hay Meadows	✓	✓	✓
Lowland Meadows	✓	✓	✓
Lowland Raised Bog	-	-	✓
Lowland Fens	-	-	✓
Native Woodland	✓	✓	✓
Hedgerows	-	-	✓
Rivers	-	-	✓
Mesotrophic Lakes	-	-	✓
Ponds	-	-	✓

Table C.7 Summary of the main *Nature in the Dales: 2020 Vision* HAP milestones.

Year	Maintain Ha (%)	Enhance Ha (%)	Total Ha (%)	Create Ha	Complete baseline monitoring	Achieve favourable condition for Semer Water
2013	39622 (65)	34 (<0.5)	39656 (65)	85	✓	-
2016	39622 (65)	12380 (20)	52002 (85)	250	-	✓
2019	39622(65)	18545 (30)	58167 (95)	420	-	-

D. THE SPECIES

D.1 Priority Species Distribution & Status in 2010

Using data derived from a number of sources including the National Biodiversity Network, national conservation organisations and local natural history societies along with survey and monitoring work undertaken as part of Nature in the Dales the distribution and status (where known) of the priority species in the National Park has been determined. This information is presented in Appendix 4.

D.2 Species Action Plan Selection

Nature in the Dales: 2020 Vision makes the assumption that the HAPs will deliver the majority of the priority species conservation objectives and targets in the YDNP. Table D.1 lists those species that are completely or partially covered by the appropriate HAPS.

For a number of species a number of other objectives and targets have been identified which are in addition to the delivery of HAPs. For these species 28 individual or grouped SAPs (Table D.2) have been produced which set out these additional objectives and targets.

For two species – Water Vole *Arvicola terrestris* and Pine Marten *Martes martes* - there is insufficient information on their distribution and status for any detailed objectives or targets to be produced. Therefore, these two species are excluded from *Nature in the Dales: 2020 Vision* until sufficient information becomes available.

A further eight priority species which were known to occur in the YDNP are listed in Table D.6. There are no UK BAP actions listed for these species that could be carried out locally within the YDNP so these have also been excluded from *Nature in the Dales: 2020 Vision*.

Full copies of each of the SAPs can be viewed online at:
www.natureinthedales.org.uk

D.3 *Nature in the Dales: 2020 Vision* Species Objectives and Targets

The overall objective and target for priority species delivered through a combination of the 28 SAPs and implementation of appropriate HAPs is:

To get 95% of the populations of priority species into a stable or increasing condition by 2020.

D.4 *Nature in the Dales: 2020 Vision* SAP Actions and Milestones

The objectives and targets listed in section D.3 will be achieved through a number of actions set out in the full Species Action Plans and summarised in Table D.4. The timetable for delivering these actions has been given as a series of “Milestones” and Table D.5 provides a summary of these.

Table D.1. Species that are completely or partially covered by appropriate HAPs.

Species	BAP Habitats
BIRDS	
Sky Lark *Alauda arvensis*	Upland Calcareous Grassland, Lowland Calcareous Grassland, Upland Hay Meadows, Lowland Hay Meadows, Upland Heathland.
Tree Pipit *Anthus trivialis*	
Lesser Redpoll *Carduelis cabaret*	Native Woodlands.
Common Linnet *Carduelis cannabina* subsp*. autochthona/cannabina*	
Twite *Carduelis flavirostris* subsp. *bensonorum/pipilans*	Upland Hay Meadows, Lowland Hay Meadows, Upland Heathland.
Lesser Spotted Woodpecker *Dendrocopos minor* subsp*. comminutus*	Native Woodlands.
Reed Bunting *Emberiza schoeniclus*	Upland Flushes Fens & Swamps, Lowland Fens, Blanket Bog, Lowland Raised Bog.
Red Grouse *Lagopus lagopus* subsp. *scotica*	Upland Heathland.
Yellow Wagtail *Motacilla flava* subsp. *flavissima*	Upland Hay Meadows, Lowland Hay Meadows.
Spotted Flycatcher *Muscicapa striata*	Native Woodlands, Hedgerows.
Eurasian Curlew *Numenius arquata*	Upland Calcareous Grassland, Lowland Calcareous Grassland, Upland Hay Meadows, Lowland Hay Meadows, Upland, Flushes Fens & Swamps, Lowland Fens, Blanket Bog, Upland Heathland, Lowland Raised Bog.
Grey Partridge *Perdix perdix*	Upland Calcareous Grassland, Lowland Calcareous Grassland, Upland Hay Meadows, Lowland Hay Meadows.
Wood Warbler *Phylloscopus sibilatrix*	Native Woodlands.
Marsh Tit *Poecile palustris*	Native Woodlands.
Black Grouse *Tetrao tetrix*	Upland Calcareous Grassland, Lowland Calcareous Grassland, Upland Hay Meadows, Lowland Hay Meadows, Upland, Flushes Fens & Swamps, Lowland Fens, Blanket Bog, Upland Heathland, Lowland Raised Bog.

Table D.1. Species that are completely or partially covered by appropriate HAPS (continued).

Species	BAP Habitats
BIRDS (continued)	
Song Thrush *Turdus philomelos* subsp. *clarkei*	Native Woodlands, Hedgerows.
Northern Lapwing *Vanellus vanellus*	Upland Calcareous Grassland, Lowland Calcareous Grassland, Upland Hay Meadows, Lowland Hay Meadows.
MAMMALS	
Bats (includes Noctule *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*)	Lowland Calcareous Grassland, Upland Calcareous Grassland, Upland Hay Meadows, Lowland Meadows, Lowland Fens, Native Woodland, Hedgerows, Rivers, Mesotrophic Lakes, Ponds.
Other Mammals (includes West European Hedgehog *Erinaceus europaeus,* Brown Hare *Lepus europaeus,*Otter *Lutra lutra*)	Lowland Calcareous Grassland, Upland Calcareous Grassland, Upland Hay Meadows, Lowland Meadows, Upland Heathland, Rivers.
BUTTERFLIES	
Butterflies (Includes Northern Brown Argus *Aricia artaxerxes,* Small Pearl-Bordered Fritillary *Boloria selene,* Small Heath *Coenonympha pamphilus,* Wall *Lasiommata megera,* White Letter Hairstreak *Satyrium w-album)*	Lowland Calcareous Grassland, Upland Calcareous Grassland, Inland Rock Outcrops & Scree Upland Hay Meadows, Lowland Meadows, Upland Heathland, Upland Flushes, Fens & Swamps, Lowland Raised Bog Lowland Fens, Native Woodland, Hedgerows.
VASCULAR PLANTS	
Common Juniper J*uniperus communis*	Upland Calcareous Grassland, Upland Heathland, Native Woodland.
Narrow Small-reed *Calamagrostis stricta*	Upland Hay Meadows, Lowland Meadows, Lowland Fens.
Other Vascular Plants (Includes: Burnt Orchid *Orchis ustulata,* An Eyebright *Euphrasia officinalis* subsp. *monticola*, Field Gentian *Gentianella campestris,* Flat Sedge *Blysmus compressus*, Frog Orchid *Coeloglossum viride*, Holly Fern *Polysthicum lonchitis,* Lesser Butterfly-orchid *Platanthera bifolia,* Northern Hawk's-beard *Crepis mollis* and Small-white Orchid *Pseudorchis albida)*	Lowland Calcareous Grassland, Upland Calcareous Grassland, Lowland Meadows, Upland Hay Meadows, Lowland Fens, Upland Flushes, Fens & Swamps.

Table D.2 Species Action Plans produced for *Nature in the Dales: 2020 Vision*.

Species Action Plans
AMPHIBIANS
Amphibians (includes Common Toad *Bufo bufo &* Great Crested Newt *Triturus cristatus)*
BIRDS
Red Grouse *Lagopus lagopus* subsp*. scotica*
Twite *Carduelis flavirostris* subsp*. bensonorum/pipilans*
House Sparrow *Passer domesticus*
Common Starling *Sturnus vulgaris* subsp. *Vulgaris*
Ring Ouzel *Turdus torquatus*
Northern Lapwing *Vanellus vanellus*
Other birds (includes Tree Pipit *Anthus trivialis,* Common Linnet *Carduelis cannabina* subsp*. autochthona/cannabina,* Common Cuckoo *Cuculus canorus,* Lesser Spotted Woodpecker *Dendrocopos minor* subsp*. comminutus,* Reed Bunting *Emberiza schoeniclus,* Common Grasshopper Warbler *Locustella naevia,* Spotted Flycatcher *Muscicapa striata,* Eurasian Curlew *Numenius arquata,* Wood Warbler *Phylloscopus sibilatrix,* Marsh Tit *Poecile palustris,* Common Bullfinch *Pyrrhula pyrrhula* subsp. *pileata)*
MAMMALS
Dormouse *Muscardinus avellanarius*
Bats (includes Noctule *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*)
Red Squirrel *Sciurus vulgaris*
Other Mammals (includes West European Hedgehog *Erinaceus europaeus,* Brown Hare *Lepus europaeus,*Otter *Lutra lutra*)
REPTILES
Reptiles (includes Slow Worm *Anguis fragilis*, Grass Snake *Natrix natrix*, Adder *Vipera berus* and Common Lizard *Zootoca vivipara*)
BEETLES
Lesser Searcher *Calosoma inquisitor*
Violet Oil-beetle *Meloe violaceus*
BUTTERFLIES
Butterflies (Includes Northern Brown Argus *Aricia artaxerxes,* Small Pearl-Bordered Fritillary *Boloria selene,* Small Heath *Coenonympha pamphilus,* Wall *Lasiommata megera,* White Letter Hairstreak *Satyrium w-album)*

Table D.2 SAPs produced for *Nature in the Dales: 2020 Vision* (continued).

FLIES
Northern Yellow Splinter *Lipsothrix errans*
MOTHS
Moths (Includes Grey Dagger *Acronicta psi,* Knot Grass *Acronicta rumicis,* The Forester *Adscita statices,* Brown-spot Pinion *Agrochola litura,* Ear Moth *Amphipoea oculea,* Dusky Brocade *Apamea remissa,* Deep-brown Dart *Aporophyla lutulenta,* Green-brindled Crescent *Allophyes oxyacanthae,* Garden Tiger *Arctia caja*, The Sprawler *Asteroscopus sphinx,* Centre-barred Sallow *Atethmia centrago,* Dark Brocade *Blepharita adusta,* Mottled Rustic *Caradrina Morpheus,* Haworth`s Minor *Celaena haworthii,* The Crescent *Celaena leucostigma,* Oak Lutestring *Cymatophorima diluta,* Brindled Ochre *Dasypolia temple,* Small Square-spot *Diarsia rubi,* Figure Of Eight *Diloba caeruleocephala,* Small Phoenix *Ecliptopera silaceata,* September Thorn *Ennomos erosaria,* Grey Mountain Carpet *Entephria caesiata,* Galium Carpet *Epirrhoe galiata,* Autumnal Rustic *Eugnorisma glareosa,* The Spinach *Eulithis mellinata,* Garden Dart *Euxoa nigricans,* Double Dart *Graphiphora augur,* Ghost Moth *Hepialus humuli,* Rosy Rustic *Hydraecia micacea,* Dot Moth *Melanchra persicariae,* Rosy Minor *Mesoligia literosa,* Powdered Quaker *Orthosia gracilis,* Dark Spinach *Pelurga comitata,* Grass Rivulet *Perizoma albulata* subsp. *albulata,* Large Wainscot *Rhizedra lutosa,* Shaded Broad-bar *Scotopteryx chenopodiata,* White Ermine *Spilosoma lubricipeda,* Buff Ermine *Spilosoma luteum,* The Anomalous *Stilbia anomala,* Hedge Rustic *Tholera cespitis,* Barred Tooth-striped *Trichopteryx polycommata,* The Cinnabar *Tyria jacobaeae,* Oak Hook-tip *Watsonalla binaria,* The Sallow *Xanthia icteritia,* Dark-barred Twin-spot Carpet *Xanthorhoe ferrugata,* Heath Rustic *Xestia agathina)*
SPIDERS
Money Spiders (Includes *Monocephalus castaneipes*, *Semljicola caliginosus*)
VASCULAR PLANTS
Common Juniper *Juniperus communis*
Lady's Slipper-Orchid *Cypripedium calceolus*
Marsh Saxifrage *Saxifraga hirculus*
Narrow Small-Reed *Calamagrostis stricta*
Other Vascular Plants (Includes: Burnt Orchid *Orchis ustulata,* An Eyebright *Euphrasia officinalis* subsp. *monticola*, Field Gentian *Gentianella campestris,* Flat Sedge *Blysmus compressus*, Frog Orchid *Coeloglossum viride*, Holly Fern *Polysthicum lonchitis,* Lesser Butterfly-orchid *Platanthera bifolia,* Northern Hawk's-beard *Crepis mollis,* Small-white Orchid *Pseudorchis albida)*
BRYOPHYTES
Nowell's Limestone Moss *Zygodon gracilis*
Other Mosses (Includes Incurved Feather Moss *Homomallium incurvatum*, Long-leaved Flapwort *Jungermannia leiantha*, Slender Thread-moss *Orthodontium gracile*, Yorkshire Feather-moss *Thamnobryum cataractarum*

Table D.2 SAPs produced for *Nature in the Dales: 2020 Vision* (continued).

LICHENS
Lichen (Includes *Anaptychia ciliaris subsp. ciliaris, Bacidia circumspecta, Bacidia incompta, Caloplaca flavorubescens,* Orange-fruited Elm Lichen *Caloplaca luteoalba, Cliostomum corrugatum, Collema fragile, Gyalecta ulmi, Leptogium saturninum, Poeltinula cerebrina, Pyrenula dermatodes, Synalissa symphorea, Toninia sedifolia, Usnea florida, Vulpicida pinastri*)
FUNGI
Fungi (Includes Beautiful Bonnet *Mycena renati,* Date-coloured Waxcap *Hygrocybe spadicea,* Fen Puffball *Bovista paludosa,* Dark-purple Earthtongue *Geoglossum atropurpureum)*

Table D.4 Summary of the *Nature in the Dales: 2020 Vision* SAPs actions.

Species Action Plans	Establish baseline population estimates / develop monitoring methods	Habitat Management Reviews	Enhanced management of HAP habitats / management of non-HAP habitats	Predator / competitor control	Planning Control and Advice
AMPHIBIANS					
AMPHIBIANS	✓	-	-	-	-
BIRDS					
RED GROUSE	-	-	-	✓	-
TWITE	-	-	✓	-	-
HOUSE SPARROW	-	-	-	-	✓
COMMON STARLING	✓	-	-	-	✓
RING OUZEL	✓	-	-	-	-
NORTHERN LAPWING	✓	-	✓	-	-
OTHER BIRDS	✓	-	-	-	-
MAMMALS					
DORMOUSE	✓	-	✓	-	-
BATS	✓	-	-	-	✓
RED SQUIRREL	✓	-	✓	✓	-
OTHER MAMMALS	✓	-	-	-	-
REPTILES					
REPTILES	✓	-	-	-	-
BEETLES					
LESSER SEARCHER	✓	-	-	-	-
VIOLET OIL-BEETLE	✓	-	-	-	-
BUTTERFLIES					
BUTTERFLIES	✓	✓	-	-	-

Table D.4. Summary of the *Nature in the Dales: 2020 Vision* SAPs actions (continued).

Species Action Plans	Establish baseline population estimates / develop monitoring methods	Habitat Management Reviews	Enhanced management of HAP habitats / management of non-HAP habitats	Predator / competitor control	Planning Control and Advice / Raising Awareness
FLIES					
NORTHERN YELLOW SPLINTER	✓	-	-	-	-
MOTHS					
MOTHS	✓	-	-	-	-
SPIDERS					
MONEY SPIDERS	✓	-	-	-	-
VASCULAR PLANTS					
COMMON JUNIPER	✓	-	✓	-	-
LADY'S SLIPPER-ORCHID	✓	-	-	-	✓
MARSH SAXIFRAGE	✓	-	✓	-	-
NARROW SMALL-REED	✓	-	-	-	-
OTHER VASCULAR PLANTS	✓	-	-	-	-
BRYOPHYTES					
NOWELL'S LIMESTONE MOSS	✓	-	✓	-	-
OTHER MOSSES	✓	-	✓	-	-
LICHENS					
LICHEN	✓	✓	-	-	-
FUNGI					
FUNGI	✓	✓	-	-	-

Table D.5 Summary of the main *Nature in the Dales: 2020 Vision* SAP milestones.

Year	Establish baseline population estimates / develop monitoring methods	Habitat Management Reviews	Enhanced management of HAP habitats / management of non-HAP habitats	Predator / competitor control	Planning Control and Advice / Raising Awareness
2013	119 species	23 species	3 species	1 species	3 species
2016	5 species	-	4 species	1 species	1 species
2019	6 species	-	5 species	2 species	2 species

Table D.6 Priority UK BAP species which occur in the National Park but have no actions listed in the UK plan that can be implemented in the YDNP.

Species	Comments
BIRDS	
Yellowhammer *Emberiza citronella*	Recent historic breeding records from Sedbergh area - national BAP actions not relevant to current status in the YDNP.
Hedge Accentor *Prunella modularis* subsp. *occidentalis*	No national BAP actions relevant to the YDNP.
European Nightjar *Caprimulgus europaeus*	Recently recorded at a single site in the YDNP(not SSSI). No national BAP actions relevant to the YDNP.
European Eel *Anguilla anguilla*	No national BAP actions relevant to the YDNP.
Atlantic Salmon *Salmo salar*	No national BAP actions relevant to the YDNP.
Brown/Sea Trout *Salmo trutta*	No national BAP actions relevant to the YDNP.
Arctic Charr *Salvelinus alpinus*	No national BAP actions relevant to the YDNP.
White-clawed Crayfish *Austropotamobius pallipes*	No national BAP actions relevant to the YDNP.

APPENDIX 1:
UK AND ENGLAND BIODIVERSITY CONSERVATION POLICY

1. Earth Summit

In 1992 the world's governments met at the Earth Summit in Rio de Janeiro to discuss how to begin the process of reversing the decline in the Earth's natural environment. They went away from the Earth Summit promising to:

"develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity, or adapt for this purpose, existing strategies, plans or programmes……"

2. UK Biodiversity Action Plan

In January 1994, the United Kingdom government did just that by publishing *Biodiversity: the UK Action Plan* (Anon, 1994). This lead to an unprecedented period of co-ordinated action to conserve a wide range of habitats and species with ambitious targets for recovery and out of which a great deal of conservation successes were achieved.

3. England Biodiversity Strategy

A great deal of progress in conserving biodiversity was made under the coordination of the original UK BAP. However, with devolved powers individual country agencies were responsible for setting new targets to deliver the UK BAP at individual country levels and in October 2002 the *England Biodiversity Strategy* was launched with a progress report in 2006. The revised vision for this strategy was as follows:

"*Our vision is for a country – its landscapes and water bodies, coasts and seas, towns and cities – where living things and their habitats are part of healthy, functioning ecosystems; where we value our natural environment, where biodiversity is embedded in policies and decisions, and where more people enjoy, understand and act to improve the natural world about them.*"

The England Biodiversity Strategy's approach to conserving biodiversity in England comprises a combination of:

- *Protecting the best wildlife sites.*
- *Promoting the recovery of declining species and habitats.*
- *Embedding biodiversity in all sectors of policy and decision-making.*
- *Enthusing people.*
- *Developing the evidence base.*

4. New approaches to biodiversity conservation in Englan*d*

4.1 *Conserving Biodiversity – the UK approach:*

In October 2007 the UK Biodiversity Partnership produced *Conserving Biodiversity – the UK approach*. This highlighted that a number of new policy drivers for biodiversity conservation action had been identified since the UK BAP was published. The most notable of these are; the need to take action to mitigate the impacts of climate change, the EU Gothenburg agreement in 2001 to halt the loss of biodiversity by 2010 and the findings of the Millennium Ecosystem Assessment (2005). The England Biodiversity Strategy provides the primary framework for delivering the UK BAP in England and took on most of these new drivers but these have been updated and re-focused based on more recent information. The 2007 report refined the vision for conserving biodiversity as follows:

"Our vision is that in our countryside, towns and seas, living things and their habitats are part of healthy, functioning ecosystems; we value our natural environment, a concern for biodiversity is embedded in policies and decisions, and more people enjoy, understand and act to improve the natural world about them."

And further refined the priorities as follows:

- *Protecting the best sites for wildlife.*
- *Targeting action on priority species and habitats.*
- *Embedding proper consideration of biodiversity and ecosystem services in all relevant sectors of policy and decision-making.*
- *Engaging people and encouraging behaviour change.*
- *Developing and interpreting the evidence base.*
- *Ensuring that the UK plays a proactive role in influencing the development of Multilateral Environmental Agreements (MEAs), and contributes fully to their domestic delivery.*

The 2007 report also indentified that, in addition to the priorities listed above, it will also be crucial to tackle three cross-cutting issues:

- *Helping biodiversity respond to climate change.*
- *Reducing the risks and damage caused by invasive non-native species.*
- *Providing spatial frameworks for landscape-scale habitat restoration.*

4.2 *Securing Biodiversity - A new framework for delivering priority habitats and species in England*

It became increasingly apparent that, despite many success stories, the overall picture for biodiversity in the UK was still very poor with many species and habitats, particularly in the wider countryside, showing serious declines. Causes of declines in priority habitats and species include habitat loss and fragmentation, inappropriate management, environmental pollution and a range of other pressures such as invasive non-native species. Climate change compounds these pressures and presents new and urgent challenges.

There is a need to make a step-change in the approach to biodiversity conservation going beyond protected sites and separate species and habitat action plans. Halting (and ultimately reversing) biodiversity loss requires more integrated landscape-scale approaches that restore whole ecosystems.

In November 2008 Natural England produced a new framework (Securing Biodiversity - A new framework for delivering priority habitats and species in England) which is intended to take forward this new approach to biodiversity conservation in England. The purpose of the new framework is to:

- *Encourage the adoption of an ecosystem approach and better embed climate change adaptation principles in climate change action.*
- *Achieve biodiversity enhancements across whole landscapes and seascapes.*
- *Achieve our priority habitat targets through greater collective emphasis on habitat restoration and expansion.*
- *Enhance the recovery of priority species by better integrating their needs into habitat-based work where possible, and through targeted species recovery work where necessary.*
- *Support the restoration of designated sites, including by enhancing the wider countryside in which they sit.*
- *Support the conservation of marine biodiversity, inside and outside of designated sites.*
- *Establish and implement a delivery programme, with agreed accountabilities, for priority habitats and species in England.*
- *Improve the integration of national, regional and local levels of delivery.*
- *Improve the links between relevant policy-makers and biodiversity practitioners.*
- *Strengthen biodiversity partnerships by clarifying roles at England, regional and local levels.*

APPENDIX 2:
RELATIONSHIP BETWEEN *NATURE IN THE DALES* (2000-2010), THE UK BIODIVERSITY ACTION PLAN (UKBAP) PRIORITY HABITATS AND THE *NATURE IN THE DALES: 2020 VISION* PRIORITY HABITATS.

Nature in the Dales (2000-2010)	UKBAP	2020 Vision
Limestone Pavement	Limestone Pavement	**Limestone Pavement**
Calcareous Grassland	Lowland Calcareous Grassland	**Lowland Calcareous Grassland**
	Upland Calcareous Grassland	**Upland Calcareous Grassland**
Lime-rich Natural Lakes	Mesotrophic Lakes	**Mesotrophic Lakes**
Limestone Rock Outcrops, Cliffs & Scree	Inland Rock Outcrops & Scree	**Inland Rock Outcrops & Scree**
Caves		
Purple Moor Grass & Rush Pasture	Purple Moor Grass & Rush Pasture	
Small Upland Wetlands	Upland Flushes, Fens & Swamps	**Upland Flushes, Fens & Swamps**
Small Base-rich Wetlands	Upland Flushes, Fens & Swamps	
	Lowland Fens	**Lowland Fens**
Small Wetlands	Lowland Fens	
Blanket & Raised Bog	Blanket Bog	**Blanket Bog**
	Lowland Raised Bog	**Lowland Raised Bog**
Upland Heathland	Upland Heathland	**Upland Heathland**
Upland Wet Acidic Grassland		
Upland Hay Meadows	Upland Hay Meadows	**Upland Hay Meadows**
Lowland Hay Meadows & Pastures	Lowland Meadows	**Lowland Meadows**
Dales Lakes & Ponds	Oligotrophic & Dystrophic Lakes	
	Ponds	**Ponds**
Upland Mixed Ashwoods	Upland Mixed Ashwoods	**Native Woodlands (includes Upland Mixed Ashwoods, Wet Woodland, Upland Oakwood, Lowland Mixed Deciduous Woodland)**
Wet Woods	Wet Woodland	
Upland Oakwoods	Upland Oakwood	
Scrub		
Other Semi-natural Ancient Woodland	Lowland Mixed Deciduous Woodland	
Rivers & Streams	Rivers	**Rivers**
Road & Rail Verges	Upland Hay Meadows	Incorporated into Upland Hay Meadows and Lowland Meadows
	Lowland Meadows	
Hedgerows	Hedgerows	**Hedgerows**
	Calaminarian Grassland	**Calaminarian Grassland**

APPENDIX 3:
EXTENT & CONDITION OF PRIORITY HABITATS IN THE YDNP IN 2009

EXTENT

Data taken from the draft Nature in the Dales Biodiversity Trends & Status Report (Thom, 2010, *in prep*.)

Habitat	Area hectares (%)			% of English resource	% of UK Resource	%of EU25 Resource
	Total	SSSI	Non-SSSI			
Limestone Pavement	1421	1347 (95)	74 (5)	56	45	1
Lowland Calcareous Grassland	234	135 (58)	99 (42)	0.6	0.6	<0.1
Upland Calcareous Grassland	5586	3058 (55)	2528 (45)	45	24	0.6
Calaminarian Grassland	Unknown	340 (Unknown)	Unknown	Unknown	Unknown	Unknown
Inland Rock Outcrops & Scree	Unknown	462 (Unknown)	Unknown	Unknown	Unknown	Unknown
Blanket Bog	34801	16499 (47)	18302 (53)	14	2	1
Upland Heathland	12529	9852 (79)	2677 (21)	5	1	<0.5
Upland Flushes, Fens & Swamps	2515	1052 (42)	1463 (58)	Unknown	Unknown	Unknown
Upland Hay Meadows	397	217 (55)	180 (45)	46	44	0.2
Lowland Meadows	2391	410 (17)	1981 (83)	33	23	0.2
Lowland Raised Bog	Unknown	58 (Unknown)	Unknown	Unknown	Unknown	Unknown
Lowland Fens	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Native Woodland(includes Upland Mixed Ashwoods, Wet Woodland, Upland Oakwood, Lowland Mixed Deciduous Woodland)	2033	906 (45)	1127 (55)	<1	<1	Unknown
Hedgerows	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Rivers	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Mesotrophic Lakes	95	95 (100)	0	15	4	Unknown
Ponds	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
TOTAL	**62002**	**34431 (54)**	**28431 (46)**			

CONDITION

Data taken from the draft Nature in the Dales Biodiversity Trends & Status Report (Thom, 2010, *in prep*.). *"good" means area of SSSI in Favourable or Unfavourable Recovering Condition and area of non-SSSI in Condition category A.

Habitat	Proportion of SSSI area (Favourable/ Unfavourable Recovering) % (Ha)	Proportion of Non-SSSI area (A) % (Ha)	Proportion of overall area (good*) % (Ha)
Limestone Pavement	97 (1304)	0 (0)	92 (1304)
Lowland Calcareous Grassland	93 (123)	45 (45)	72 (168)
Upland Calcareous Grassland	94 (2886)	62 (1568)	80 (4454)
Calaminarian Grassland	98 (340)	Unknown	Unknown
Inland Rock Outcrops & Scree	99 (459)	Unknown	Unknown
Blanket Bog	97 (16025)	21 (3832)	57 (19857)
Upland Heathland	98 (9680)	17 (360)	80 (10040)
Upland Flushes, Fens & Swamps	90 (723)	16 (235)	38 (958)
Upland Hay Meadows	97 (210)	40 (72)	71 (282)
Lowland Meadows	96 (394)	49 (970)	57 (1364)
Lowland Raised Bog	100 (58)	Unknown	Unknown
Lowland Fens	Unknown	Unknown	Unknown
Native Woodland(includes Upland Mixed Ashwoods, Wet Woodland, Upland Oakwood, Lowland Mixed Deciduous Woodland)	92 (835)	13 (293)	55 (1128)
Hedgerows	Unknown	Unknown	Unknown
Rivers	Unknown	Unknown	Unknown
Mesotrophic Lakes	64 (61)	-	64 (61)
Ponds	Unknown	Unknown	Unknown
All Habitats	**93 (33098)**	**29 (7375)**	**67 (39616)**

APPENDIX 4: DISTRIBUTION & STATUS OF PRIORITY SPECIES IN THE YDNP IN 2010

Species	Dales population	Dales status	UK Population	UK Status	European Status
AMPHIBIANS					
Common Toad *Bufo bufo*	Sporadic recorded distribution	Unknown	Widespread & common	Declining in southeast	Unknown
Great Crested Newt *Triturus cristatus*	Two populations recorded	Stable	Widespread & common	Declining	Threatened
BIRDS					
Sky Lark *Alauda arvensis*	Unknown	Unknown	18 million summer territories	Red List – Decline	Unknown
Tree Pipit *Anthus trivialis*	Unknown	Unknown	74,000 summer territories	Red List – Rapid Decline	No concern
Lesser Redpoll *Carduelis cabaret*	Unknown	Unknown	25,000 pairs	Red List – Decline	No concern
Common Linnet *Carduelis cannabina* subsp*. autochthona/cannabina*	Unknown	Unknown	535,000 summer territories	Red List – Rapid Decline	Declining
Twite *Carduelis flavirostris* subsp. *bensonorum/pipilans*	Breeding season records from a small number of sites	Unknown	11,000 summer pairs	Red List	No concern
Common Cuckoo *Cuculus canorus*	Unknown	Possibly Declining	14,000 pairs	Red List – Rapid Decline	No concern
Lesser Spotted Woodpecker *Dendrocopos minor* subsp*. comminutus*	Unknown	Unknown	2200 pairs	Red List – Rapid Decline	No concern
Reed Bunting *Emberiza schoeniclus*	Unknown	Unknown	185,000 summer territories	Amber List – Shallow Decline	No concern
Red Grouse *Lagopus lagopus* subsp. *scotica*	Unknown	Unknown	155,000 summer pairs	Amber List	No concern
Common Grasshopper Warbler *Locustella naevia*	Unknown	Unknown	11,000 pairs	Red List – Rapid Decline	No concern
Yellow Wagtail *Motacilla flava* subsp. *flavissima*	Unknown	Stable	19,000 territories	Red List – Rapid Decline	No concern
Spotted Flycatcher *Muscicapa striata*	Unknown	Unknown	59,000 summer territories	Red List – Rapid Decline	Depleted
Eurasian Curlew *Numenius arquata*	Unknown	Unknown	105,000 summer pairs	Amber List – Probable Decline	Declining

Species	Dales population	Dales status	UK Population	UK Status	European Status
BIRDS (Continued)					
House Sparrow *Passer domesticus*	Widespread	Unknown	13.4 million summer pairs	Red List – Rapid Decline	Declining
Grey Partridge *Perdix perdix*	Unknown	Unknown	73,000 pairs summer	Red List – Rapid Decline	Vulnerable
Wood Warbler *Phylloscopus sibilatrix*	Unknown	Unknown	17,000 territories	Red List –Decline	Declining
Marsh Tit *Poecile palustris*	Unknown	Unknown	53,000 territories	Red List –Rapid Decline	Declining
Common Bullfinch *Pyrrhula pyrrhula* subsp. *pileata*	Unknown	Unknown	158,000 territories	Amber List – Moderate Decline	No concern
Common Starling *Sturnus vulgaris* subsp. *Vulgaris*	Unknown	Declining	9.5 million summer birds	Red List –Rapid Decline	Declining
Black Grouse *Tetrao tetrix*	144 lekking males	Increasing	1,070 males	Red List –Decline	Depleted
Song Thrush *Turdus philomelos* subsp. *clarkei*	Unknown	Unknown	1 million territories	Red List – Moderate Decline	No concern
Ring Ouzel *Turdus torquatus*	Unknown	Unknown	6,900 pairs	Red List – Probable Decline	No concern
Northern Lapwing *Vanellus vanellus*	Unknown	Unknown	154,000 pairs	Red List – Moderate Decline	Vulnerable
Yellowhammer *Emberiza citronella*					
Hedge Accentor *Prunella modularis* subsp*. occidentalis*					
European Nightjar *Caprimulgus europaeus*					
FISH					
European Eel *Anguilla anguilla*					
Atlantic Salmon *Salmo salar*					
Brown/Sea Trout *Salmo trutta*					
Arctic Charr *Salvelinus alpinus*					

Species	Dales population	Dales status	UK Population	UK Status	European Status
MAMMALS					
West European Hedgehog *Erinaceus europaeus*	Unknown	Probable Decline	Unknown	Least Concern – Probable Decline	Least Concern
Brown Hare *Lepus europaeus*	Unknown	Probable Decline	817,500-1,250,000	Least Concern – Probable Decline	Least Concern
Otter *Lutra lutra*	Present on all catchments	Stable or increasing	12,900	Near Threatened – Increase	Near Threatened
Dormouse *Muscardinus avellanarius*	Reintroduced to 1 site	Increasing	40000	Vulnerable – Decline	Near Threatened
Noctule *Nyctalus noctula*	Unknown	Unknown	Uncommon	Possible Increase	Unknown
Soprano Pipistrelle *Pipistrellus pygmaeus*	Unknown	Unknown	Unknown	Stable	Unknown
Brown Long-eared Bat *Plecotus auritus*	Unknown	Unknown	Unknown	Stable	Unknown
Red Squirrel *Sciurus vulgaris*	Present in at least 87 1km squares	Stable	161,000	Vulnerable – trend unknown	Not Threatened
Water Vole *Arvicola terrestris*	Unknown	Unknown			
Pine Marten *Martes martes*	Unknown	Unknown			
REPTILES					
Slow Worm *Anguis fragilis*	Rare (possibly under-recorded)	Unknown	Widespread & common	Not threatened – possible small decline	Not Threatened
Grass Snake *Natrix natrix*	Rare (only known from one site)	Unknown	Widespread & common	Not threatened – possible small decline	Not Threatened
Adder *Vipera berus*	Rare (possibly under-recorded)	Unknown	Rare	Not threatened – possible small decline	Not Threatened
Common Lizard *Zootoca vivipara*	Large population	Unknown	Widespread & common	Not threatened – possible small decline	Not Threatened
BEETLES					
Lesser Searcher *Calosoma inquisitor*	Present at 4 sites	Unknown	~50 sites	Marked Decline	Not Threatened
Violet Oil-beetle *Meloe violaceus*	Present at 1 site	Unknown	Unknown	Not Threatened	Not Threatened

Species	Dales population	Dales status	UK Population	UK Status	European Status
BUTTERFLIES					
Northern Brown Argus *Aricia artaxerxes*	42 colonies	Stable	Restricted to northern England & Scotland	Range Decline in south	Not Threatened
Small Pearl-bordered Fritillary *Boloria selene*	9 colonies	Stable	Widespread across upland and western Britain	Range Decline in England	Not Threatened
Small Heath *Coenonympha pamphilus*	Widespread	Stable	Widespread	Range Stable	Not Threatened
Wall *Lasiommata megera*	Restricted distribution	Unknown	Found in northern and western Britain	Slight spread in northern England	Not Threatened
White-letter Hairstreak *Satyrium w-album*	Probably under recorded, recent records from six 1km x 1km squares	Unknown	Range expanding in some areas after major decline	Possible Increase	Not Threatened
CRUSTACEANS					
White-clawed Crayfish *Austropotamobius pallipes*	Unknown	Decline	166 occupied 10-km squares in UK	Decline	Unknown
FLIES					
Northern Yellow Splinter *Lipsothrix errans*	One Site	Unknown	Nationally Scarce	Unknown	Unknown
MOTHS					
Grey Dagger *Acronicta psi*	Common				
Knot Grass *Acronicta rumicis*	Common				
Brown-spot Pinion *Agrochola litura*	Unknown				
Ear Moth *Amphipoea oculea*	Unknown				
Dusky Brocade *Apamea remissa*	Common				
Deep-brown Dart *Aporophyla lutulenta*	Unknown				
Green-brindled Crescent *Allophyes oxyacanthae*	Common				
Garden Tiger *Arctia caja*	Unknown				
The Sprawler *Asteroscopus sphinx*	Unknown				

Species	Dales population	Dales status	UK Population	UK Status	European Status
MOTHS (continued)					
Centre-barred Sallow *Atethmia centrago*	Unknown				
Dark Brocade *Blepharita adusta*	Unknown				
Mottled Rustic *Caradrina Morpheus*	Unknown				
Haworth`s Minor *Celaena haworthii*	Very common				
The Crescent *Celaena leucostigma*	Unknown				
Oak Lutestring *Cymatophorima diluta*	Unknown				
Brindled Ochre *Dasypolia templi*	Unknown				
Small Square-spot *Diarsia rubi*	Unknown				
Figure of Eight *Diloba caeruleocephala*	Common				
Small Phoenix *Ecliptopera silaceata*	Common				
September Thorn *Ennomos erosaria*	Rare				
Grey Mountain Carpet *Entephria caesiata*	Abundant on moors				
Galium Carpet *Epirrhoe galiata*	Unknown				
Autumnal Rustic *Eugnorisma glareosa*	Unknown				
The Spinach *Eulithis mellinata*	Common				
Garden Dart *Euxoa nigricans*	Unknown				
Double Dart *Graphiphora augur*	Unknown				
Ghost Moth *Hepialus humuli*	Common				
Rosy Rustic *Hydraecia micacea*	Common				
Dot Moth *Melanchra persicariae*	Common				
Rosy Minor *Mesoligia literosa*	Unknown				
Powdered Quaker *Orthosia gracilis*	Unknown				
Dark Spinach *Pelurga comitata*	Unknown				
Grass Rivulet *Perizoma albulata* subsp. *albulata*	Unknown				
Large Wainscot *Rhizedra lutosa*	Unknown				
Shaded Broad-bar *Scotopteryx chenopodiata*	Unknown				
White Ermine *Spilosoma lubricipeda*	Very common				
Buff Ermine *Spilosoma luteum*	Very common				

Species	Dales population	Dales status	UK Population	UK Status	European Status
MOTHS (continued)					
The Anomalous *Stilbia anomala*	Unknown				
Hedge Rustic *Tholera cespitis*	Unknown				
Barred Tooth-striped *Trichopteryx polycommata*	Unknown				
The Cinnabar *Tyria jacobaeae*	Unknown				
Oak Hook-tip *Watsonalla binaria*	Unknown				
The Sallow *Xanthia icteritia*	Unknown				
Dark-barred Twin-spot Carpet *Xanthorhoe ferrugata*	Widespread				
Heath Rustic *Xestia agathina*	Scarce				
The Forester *Adscita statices*	1 site	Unknown	Widespread	Decline	Unknown
SPIDERS					
A Money Spider *Monocephalus castaneipes*	7 10km squares	Unknown	82 10km squares	Unknown	Not Threatened
A Money Spider *Semljicola caliginosus*	5 sites	Unknown	Endemic to Cumbria, Yorkshire and the Scottish Highlands	Threatened	Not applicable
VASCULAR PLANTS					
Burnt Orchid *Orchis ustulata*	22 sites	Unknown	Unknown	Endangered – Decline	Unknown
An Eyebright *Euphrasia officinalis* subsp. *monticola*	12 sites	Unknown	Unknown	Vulnerable – Decline	Unknown
Field Gentian *Gentianella campestris*	12 sites	Unknown	Unknown	Vulnerable – Decline	Unknown
Flat Sedge *Blysmus compressus*	25 sites	Unknown	Unknown	Vulnerable – Decline	Unknown
Frog Orchid *Coeloglossum viride*	25 sites	Unknown	Unknown	Vulnerable – Decline	Unknown
Holly-fern *Polysthicum lonchitis*	8 sites	Unknown	Unknown	Vulnerable – Decline	Unknown
Common Juniper *Juniperus communis*	29 sites	Unknown	Unknown	Least Concern – Decline	Unknown

Species	Dales population	Dales status	UK Population	UK Status	European Status
VASCULAR PLANTS (continued)					
Lady's-Slipper-orchid *Cypripedium calceolus*	1 site plus reintroductions	Stable (Increasing due to reintroductions	1 site plus reintroductions	Critically Endangered - Stable (Increasing due to reintroductions	Unknown
Lesser Butterfly-orchid *Platanthera bifolia*	10 sites	Unknown	Unknown	Vulnerable – Decline	Unknown
Marsh Saxifrage *Saxifraga hirculus*	1 site	Stable but on edge of decline	Unknown	Vulnerable – Decline	Unknown
Narrow Small-reed *Calamagrostis stricta*	1 site	Unknown	Unknown	Vulnerable – Decline	Unknown
Northern Hawk's-beard *Crepis mollis*	3 current unknown sites	Unknown	Unknown	Endangered	Unknown
Small-white Orchid *Orchis alba*	2 historical sites	Unknown	Unknown	Vulnerable – Decline	Unknown
BRYOPHYTES					
Incurved Feather-Moss *Homomallium incurvatum*	8 hectads	Stable	Unknown	Critically Endangered – Stable following decline	Unknown
Long-leaved flapwort *Jungermannia leiantha*	1 historical site	Unknown	Unknown	Critically Endangered – Declining	Unknown
Slender Thread-Moss *Orthodontium gracile*	1 historical site	Unknown	Unknown	Vulnerable – Declining	Unknown
Yorkshire Feather-Moss *Thamnobryum cataractarum*	1 stretch of river (endemic)	Stable	1 stretch of river	Vulnerable – Stable	Unknown
Nowell's Limestone-Moss *Zygodon gracilis*	7 historical sites (endemic)	Stable	7 historical sites	Endangered – Stable following Decline	Unknown
LICHENS					
A Lichen *Anaptychia ciliaris* subsp. *ciliaris*	Present in 19 10km squares	Unknown	Formerly widespread	Marked Decline	Not Threatened
A Lichen *Bacidia circumspecta*	Present in 1 10km square	Unknown	Rare	Declining	Not Threatened

Species	Dales population	Dales status	UK Population	UK Status	European Status
LICHENS (continued)					
A Lichen *Bacidia incompta*	Present in 1 10km square	Unknown	Unknown	Vulnerable - Declining	Not Threatened
A Lichen *Caloplaca flavorubescens*	Present in 1 10km square	Unknown	Nationally Scarce	Threatened – Dramatic Decline	Not Threatened
Orange-fruited Elm Lichen *Caloplaca luteoalba*	Present in 3 10km squares	Unknown	Very Rare	Vulnerable – Decline	Not Threatened
A Lichen *Clistomum corrugatum*	Present in 2 10km squares	Unknown	Restricted Distribution	Vulnerable – Decline	Not Threatened
A Lichen *Collema fragilis*	Present in 1 10km square	Unknown	Rare	Vulnerable – Decline	Not Threatened
A Lichen *Gyalecta ulmi*	Present in 3 10km squares	Unknown	Rare	Endangered – Decline	Not Threatened
A Lichen *Leptogium saturninum*	Present in 1 10km square	Unknown	Scarce	Vulnerable – Decline	Not Threatened
A Lichen *Poeltinula cerebrina*	Present in 4 10km squares	Unknown	Rare	Vulnerable – Decline	Not Threatened
A Lichen *Pyrenula dermatodes*	Present in 3 10km squares	Unknown	Very Rare	Critically Endangered – trend unknown	Red Listed
A Lichen *Synalissa symphore*	Present in 6 10km squares	Unknown	Rare	Vulnerable – Decline	Not Threatened
A Lichen *Toninia sedifolia*	Present in 17 10km squares	Unknown	Widespread	Not Threatened – Decline	Not Threatened
A Lichen *Usnea florida*	Present in 1 10km square	Unknown	Widespread	Not Threatened – Decline	Not Threatened
A Lichen *Vulpicida pinastri*	Present in 1 10km square	Unknown	Rare	Near Threatened – trend unknown	Not Threatened
FUNGI					
Beautiful Bonnet *Mycena renati*	Historical record	Unknown	Restricted Distribution	Critically Endangered – Decline	Unknown
Date-coloured Waxcap *Hygrocybe spadicea*	Historical record	Unknown	Restricted Distribution	Vulnerable – trend unknown	Provisional Red List
Fen Puffball *Bovista paludosa*	4 sites	Unknown	Unknown	Unknown	Unknown

Species	Dales population	Dales status	UK Population	UK Status	European Status
FUNGI (continued)					
Dark-purple Earthtongue *Geoglossum atropurpureum*	Historical record	Unknown	40 Hectads	Decline	Red List