

Proceedings from the conference

BANKING ON BIODIVERSITY STAKEHOLDER EVENT

THE COURTYARD, HEREFORD

12TH MARCH 2008

**ORGANISED BY HEREFORDSHIRE COUNCIL WITH
FINANCIAL ASSISTANCE FROM NATURAL
ENGLAND.**

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INTRODUCTION

Approximately 200 representatives from Local Authorities and Public bodies were invited to attend a seminar to learn more about Section 40 of the Natural Environment and Rural Communities Act (NERC) 2006 and its implications on these bodies. Speakers were invited from across the UK and Galway in Ireland to cover a wide range of associated subjects.

84 delegates were able to attend on the day and it proved a success – not only in the feedback that we received about the days proceedings, but it went deeper than that, delegates went away feeling inspired and ready to change their working practice taking biodiversity into consideration where they are not already.

Speakers covered a wide range of subjects including well-being & biodiversity, partnerships & best value, strategic programmes, contracts for wildlife, roles for public authorities, parish council involvement, as well as a general introduction to the legislation and a Herefordshire perspective.

The event was chaired by Michael Hainge, Director for Environment Herefordshire Council.

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PRESENTATION 1

Doing your Duty: An introduction to Section 40 of the NERC Act 2006

Sarah Wilkinson & Charlotte Rose, Wiltshire Wildlife Trust & Wiltshire Biodiversity Partnership

What is biodiversity?

The variety of living things, including:

- all species of plants and animals
- the genetic variation amongst them
- the complex ecosystems of which they are a part

The Importance of Biodiversity

- Health and well-being
- Essential products and materials
- Sustaining local economies
- Provision of foundations of our natural life-support systems
- Provides the ability to adapt to change

Introducing the NERC Act...

Extends the existing Section 74 duty of the Wildlife and Countryside Act 1981 (as amended) to all public authorities.

Aims to:

- Raise the profile of biodiversity
- Clarify and consolidate existing requirements with regard to biodiversity
- Embed biodiversity in the decision-making process

Under Section 40 of the NERC Act 2006:

- 1) Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 2) In complying with subsection (1), a Minister of the Crown, government department or the National Assembly for Wales must in particular have regard to the United Nations Environmental Programme Convention on Biological Diversity of 1992.
- 3) Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.
- 4) "Public authority" means any of the following —
 - (a) a Minister of the Crown;
 - (b) the National Assembly for Wales;
 - (c) a public body (including a government department, a local authority and a local planning authority);
 - (d) a person holding an office —
 - (i) under the Crown,
 - (ii) created or continued in existence by a public general Act, or
 - (iii) the remuneration in respect of which is paid out of money provided by Parliament;
 - (e) a statutory undertaker.
- 5) In this section — "local authority" means —
 - (a) in relation to England, a county council, a district council, a parish council, a London borough council, the Common Council of the City of London or the Council of the Isles of Scilly.
 - (b) in relation to Wales, a county council, a county borough councillor a community council; "local planning authority" has the same meaning as in the Town and Country Planning Act 1990 (c. 8); "Minister of the Crown" has the same meaning as in the Ministers of the Crown Act 1975 (c. 26); "statutory undertaker" means a person who is or is deemed to be a statutory undertaker for the purposes of any provision of Part 11 of the Town and Country Planning Act 1990.

NERC Duty Statutory undertakers

Defined under Part XI 262 (1) of the Town and Country Planning Act 1990, as:

“persons authorised by any enactment to carry on any railway, light railway, tramway, road transport, water transport, canal, inland navigation, dock, harbour, pier or lighthouse undertaking or any undertaking for the supply of hydraulic power and a relevant airport operator (within the meaning of Part V of the [1986 c. 31.] Airports Act 1986).”

Examples

Wiltshire, Swindon and Cotswold Water Park Biodiversity Partnerships NERC Duty Guidance Conference, June 2007

NMSI Science Museum, Wroughton

- Survey and monitoring before and after construction
- Have planted 160 acres of woodland to mimic adjacent Clouts Wood SSSI, and provide linkages
- 6km of hedgerows
- Installation of bat and bird boxes

Wessex Water:

- Has a corporate BAP
- Operates an EMS, with a Green Travel Plan
- Closely involved in the local BAP process
- Have a small grants scheme

Complying with the Duty

No enforcement measures contained within the Act

BUT – significant benefits to complying including:

- Meeting CSR obligations
- Improved employee well-being/health
- Develops/maintains relationship with community
- Helps achieve targets

Failure to comply could lead to:

- PR damage to your organisation
- Significant legal costs
- Criminal Conviction

Where next?

- Defra reviewing Duty 2009
- Will also review transcript of Buglife case
- Some work being done by individual LPAs to self-assess NERC Duty compliance

REMEMBER – NERC is part of a wider biodiversity conservation framework – use in conjunction with other policies and legislation – e.g. CSR requirements, EMS, Employee wellbeing, PPS9 etc.

PRESENTATION 2

Biodiversity and the Highways Agency soft estate

Geoff Richards, Regional Environmental Advisor, Highways Agency, South West England.

The Highways Agency

- Highways agency role: operation and improvement of the trunk road network in England.
- Responsible for design standards and advice for trunk roads throughout the UK.
- TR network carries 35% of all traffic, 60% of all HGV movement in England
- TR network is high capacity, high speed: result- habitat fragmentation

The estate

- The TR network encompasses 50,000 hectares of land.
- 30,000 hectares is the soft estate beyond the edge of the carriageway.
- 18,000 hectares is the size of the motorway soft estate
- 12,000 hectares surrounds the all purpose roads.
- The TR network encompasses 50,000 hectares of land.
- 30,000 hectares is the soft estate beyond the edge of the carriageway.
- 18,000 hectares is the size of the motorway soft estate
- 12,000 hectares surrounds the all purpose roads.
- The soft estate is divided between planted areas, about 45 % and grassland that is 55 % of area.
- 51 million trees have been planted on the estate since 1958.
- We have created substantial linear woods and scrub- attractive to deer as a refuge and a corridor.

Background to highways agency biodiversity action plan

June 1992 “earth summit” in Rio de Janeiro. Convention signed by 150 world leaders who agreed to develop national plans for the conservation of biodiversity

December 1995 the UK biodiversity action plan was published (400 threatened species and 38 habitats were selected for urgent action)

March 2002 the Highways Agency biodiversity action plan launched

The HABAP is made up of:

5 habitat action plans - woodland, grassland, water features, boundary features and heath land

20 species action plans: ranging from bush crickets to bats and tower mustard to narrow headed ants

The HA biodiversity action plan was prepared after a careful study of the UKBAP and local BAP's and concentrates on species and habitats where there is significant linkage with the trunk road network

Water is an important feature of the estate

Where ditches and ponds form part of the drainage system the biodiversity value may be transient or temporary.

Sympathetic maintenance is the requirement.

The water vole

When maintaining ditches and ponds some areas must be left undisturbed to provide continuity of habitat for water voles

Newt pond on A50

- Most ponds are part of the drainage system, and will develop biodiversity interest naturally
- Manage with care - protected species can be present.

Dragonflies

- An example of one of the many invertebrates that use the highway ditch and pond system
- HABAP action plan for the southern damselfly and *Agabus brunneus* - a diving beetle.

Otters

- Management should be focussed on water quality and maintenance of mitigation measures.
- Need a dry ledge through culverts and local fencing to keep them off carriageways.

Kestrel

- Needs extensive open grasslands
- Benefits from nest boxes – has successfully used those put up on signs and gantries on M25 and M40.

Black poplar

- Opportunities to propagate from existing specimen trees and plant significant numbers on the estate
- Ensure they are well back from carriageway – 9 metres minimum.

Biodiversity and autumn colour

- Native shrubs should be the backbone of highway planting
- They combine visual attractiveness with food and shelter for wildlife
- Keep them 3 metres back from road edge

Bats - 7 are priority species

- Present throughout the network
- Advice note ha 80/99 provides guidance to managers
- Trees, hedges, water- all can be important to bats
- Will use older structures as roosts so inspection and maintenance must take account of their possible presence
- Bat boxes can be put up in the right locations to encourage them

Red squirrel

- On the retreat, needs all the help we can give
- Rope bridges to maintain connectivity
- Appropriate management of roadside woodlands

Reptiles - adder

- Widely distributed but increasingly found within the highway estate
- One of six native species of reptile
- Smooth snakes and sand lizards are protected at the European level

Habitat fragmentation

- M23 south of the north downs and approaching the m25
- D3, hardened reserve- prodigious barrier to wildlife
- Cost 341 has researched these effects and a handbook on fragmentation and how to deal with its effects
- Advice on green bridges will follow in DMRB
- Maintenance of fences is important to keep deer, badgers and otters off the road
- They need to be 'directed' to useable underpasses, culverts and accommodation bridges

Lowland heathland

- Sensitive to spray drift-salt damage
- Easily degraded through insensitive maintenance

Linear woodland on A52

- A belt of predominantly native cherry *prunus avium*
- Screening and biodiversity benefits and road user interest

Species-rich grassland

- Potential to create a number of UKBAP habitats on the estate
- Can be an improvement combined with engineering work

Delivery mechanisms

- Key performance indicators – mechanism to incentivise delivery agents
- Mitigation and enhancement associated with minor (local network management schemes) to major schemes

Considerations in developing plans

- Conflict with other objectives
- Maintenance of features (sustainable?)
- Viability of habitats (size of plots)
- External pressures
- Geographic suitability
- Cost
- Objectives?
- Timescale
- Legal requirements (CDM regs, health and safety)

PRESENTATION 3

The role of public bodies

Pete Charleston, Wildlife and Environmental Crime Staff Officer, North Wales Police

Public authority means a public body or a person holding an office under the crown

The impact of the duty.

- Weak duty
- Not an offence
- No duty to report

Administrative Implementation.

- Sourcing green energy
- Green fleet
- Green dragon award
- Carbon neutral

Operational implementation.

- Full time WCO
- Secondment to SNCO
- Divisional WCO's
- Annual report

Biodiversity projects

- Ospreys – 24 hour surveillance at breeding site
- GCN's – site management
- Bats
- Barn owls.
- Wildlife corridors
- Flower meadow – working partnership with Conwy Council on HQ grounds
- Peregrines – nest on HQ building

PRESENTATION 4

Ecosystems and Health: The importance of biodiversity to human health and well-being Conor Kretsch, Director CoHab Initiative

Summary

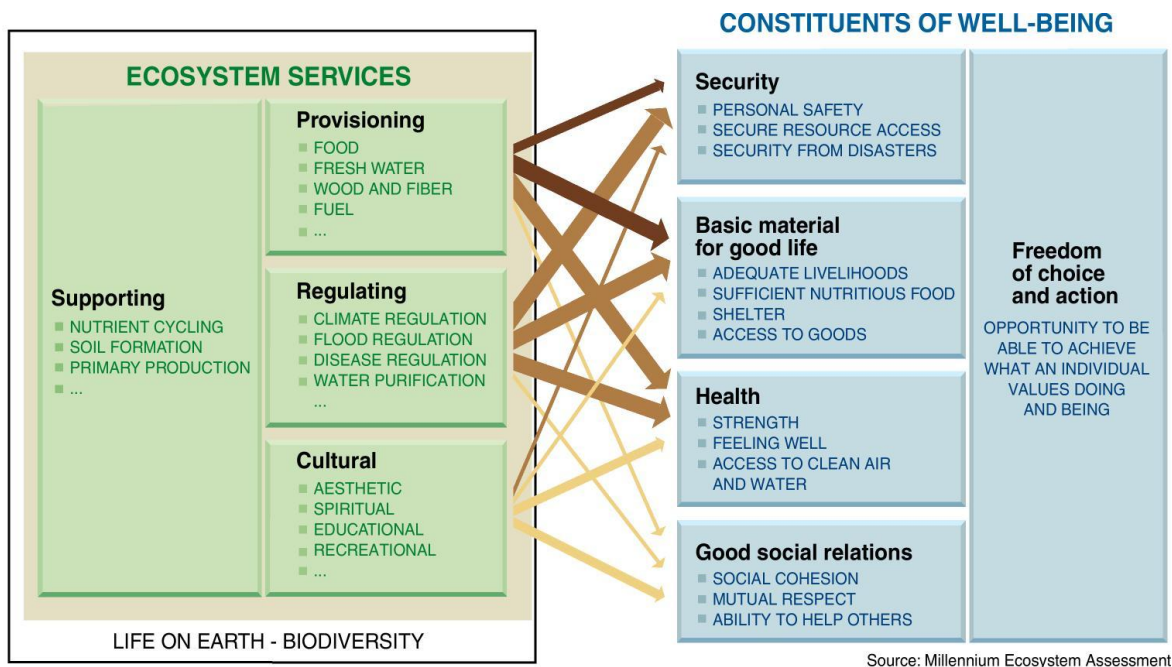
- Overview of health-biodiversity linkages and ecosystem services
- Examples of biodiversity-related health issues in the U.K
- Gaps and policy challenges

Human Ecology

- Ecology – study of life
- Academia, policy and practice: traditional ecological constructs and concepts overlook human ecology
- Humans are a fundamental factor in global ecology and cannot be separated out from living systems

Ecosystem Services

- No organism can exist in isolation
- People depend on biodiversity, as do all living organisms and ecological systems...
 - Species upon ecosystems, ecosystems upon habitats upon ecological relationships ...
- “Life supports Life”



ARROW'S COLOR Potential for mediation by socioeconomic factors	ARROW'S WIDTH Intensity of linkages between ecosystem services and human well-being
<div style="display: inline-block; width: 15px; height: 10px; background-color: #f4a460; border: 1px solid black; margin-right: 5px;"></div> Low	<div style="display: inline-block; width: 15px; border-bottom: 1px solid black; margin-right: 5px;"></div> Weak
<div style="display: inline-block; width: 15px; height: 10px; background-color: #c85130; border: 1px solid black; margin-right: 5px;"></div> Medium	<div style="display: inline-block; width: 15px; border-bottom: 2px solid black; margin-right: 5px;"></div> Medium
<div style="display: inline-block; width: 15px; height: 10px; background-color: #8b4513; border: 1px solid black; margin-right: 5px;"></div> High	<div style="display: inline-block; width: 15px; border-bottom: 3px solid black; margin-right: 5px;"></div> Strong

Support for Human Health

- Physical health – fitness and freedom from disease
- Mental health - spiritual and psychological well-being and stability
- Social health – community relationships, cohesiveness, security and stability
- Quality of Life

Basic linkages

- Disease ecology, disease regulation
- Natural products and medicinal resources
- Break down / remediation of pollutants
- Nutrition security and dietary health
- Physical fitness, Psychological well-being
- Social cohesion and community
- Protection against extreme weather events, floods etc

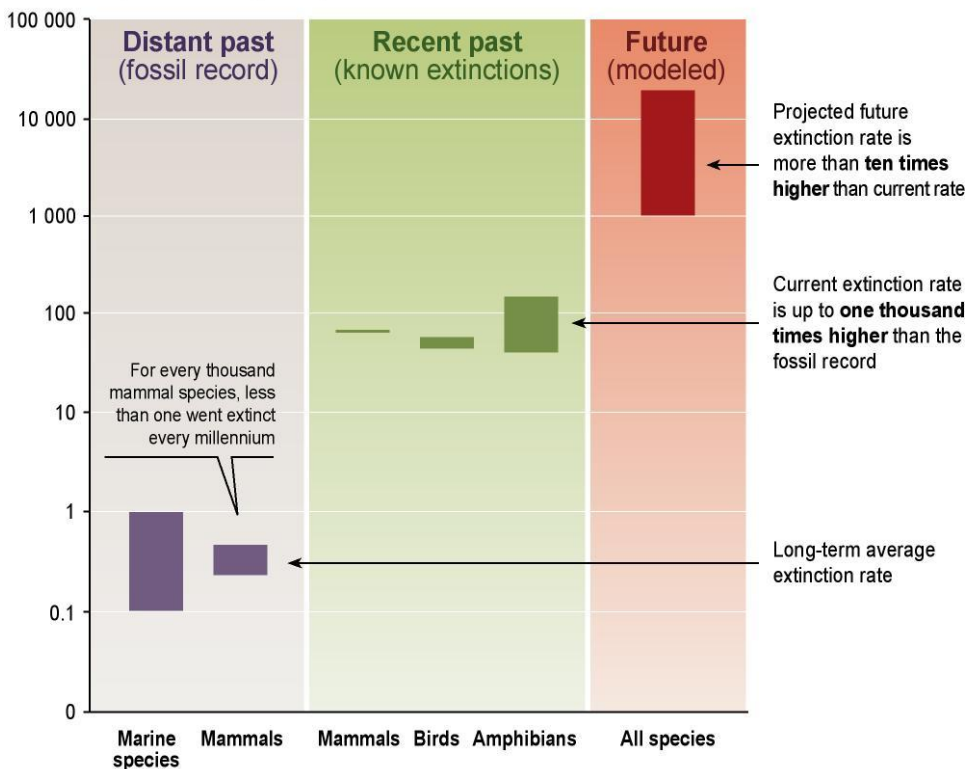
Is nature *really* that important?

- Car analogy

Convention on Biological Diversity

- Strategic plan “to achieve, by the year 2010, a significant reduction in the current rate of loss of biological diversity”
- EU 2010 commitment – *halt* biodiversity loss by 2010

Extinctions per thousand species per millennium



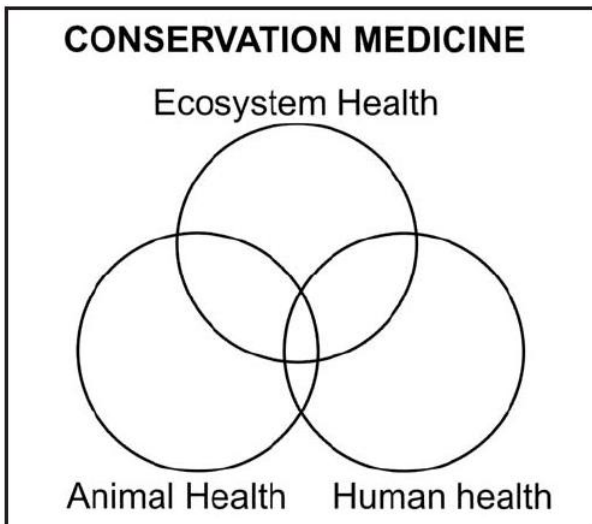
Source: Millennium Ecosystem Assessment

Ecosystem approach

- Biodiversity conservation best achieved through the “ecosystem approach” – accounting for the complex interactions and interdependencies of habitats & species within systems, and interaction of human communities and economies
- Demands a cross-sectoral approach
- Ecosystems as delivery systems

Ecosystem approach to Health

- *Systemic* approach to population health
- Holistic approach that recognises the fundamental importance of ecosystem goods and services
- ...and holistic approaches to biodiversity conservation that recognise intimate relationships between human and ecological health and sustainability



Cross-linkages

- The use of common indicators
- Some health indicators can be of direct or indirect relevance to the conservation community
- ... and vice versa
- Many similar examples – e.g. fisheries and finance (environmentalists and economists)

EU 2010 target

- Current EU legislation based on CBD and other related conventions (RAMSAR, CMS, UNCCD) - Habitats Directive, Birds Directive also influences EIA, SEA, Water Framework Directives, and indirectly influences “non-ecology” areas: food quality, fisheries management, business standards
- “*Halt* the loss of biodiversity” within EU territories by 2010

Potential biodiversity-related health issues in U.K

- Mammal populations and parasitic / viral diseases of humans and domestic animals.

Potential biodiversity-related health issues in U.K

Objectives	Targets	Indicators
<ul style="list-style-type: none"> • Preserve and enhance biological diversity • Protect public health 	<ul style="list-style-type: none"> • Limit/prevent developments which could result in impacts on habitats which support mammal fauna • ...affect status of mammal populations 	<ul style="list-style-type: none"> • Burden of parasitic infections in pets, children, adults. • Zoonotic viral outbreaks

Urban biodiversity – links with physical health, mental health and social behaviour

Objectives	Targets	Indicators
<ul style="list-style-type: none"> • Preserve and enhance biological diversity • Improve physical and mental health • Tackle anti-social behaviour 	<ul style="list-style-type: none"> • Improve quality of urban greenspace for people and wildlife • Increase public access to / use of the countryside • Increase participation, stewardship 	<ul style="list-style-type: none"> • Incidence of coronary heart disease • Prevalence of obesity, diabetes • Prevalence of stress, depression • Crime committed by minors

Agricultural biodiversity – dietary health & nutrition, diseases of affluence, and ecosystem services.

Objectives	Targets	Indicators
<ul style="list-style-type: none"> • Preserve and enhance biological diversity • Improve dietary health 	<ul style="list-style-type: none"> • Increase the genetic and species diversity of food items produced and consumed • Achieve reduction in the burden of diseases of affluence 	<ul style="list-style-type: none"> • Numbers of varieties produced/consumed, area of land under each crop, market share etc • Human disease prevalence data • Crop health statistics

Badgers and bovine tuberculosis.

Objectives	Targets	Indicators
<ul style="list-style-type: none"> • Preserve and enhance biological diversity • Preserve, maintain and improve livestock health • Support agricultural development 	<ul style="list-style-type: none"> • Avoid developments which may result in impacts on habitats which support mammal fauna • ...affect status of mammal populations 	<ul style="list-style-type: none"> • Indicators • Burden of bovine TB – numbers of affected cattle, disease distribution • Badger population data

Protection from effects of extreme weather events.

Objectives	Targets	Indicators
<ul style="list-style-type: none"> • Preserve and enhance biological diversity • Secure livelihoods • Protect infrastructure and industry 	<ul style="list-style-type: none"> • Improve and develop aquatic / wetland / riparian ecosystems • Enhance defenses in high risk areas 	<ul style="list-style-type: none"> • Physical area in buffer zones. • Economic indices of (e.g.) flood damage in high risk areas

- Just some of many examples in Ireland
- Illustrate the importance of remembering the reasons for preserving biodiversity
- Also the importance of considering downstream impacts of ecological disturbance on human health and welfare
- Cumulative, additive and synergistic impacts must be addressed in SEA (and EIA) processes
- Requires a long-term view of all cases
- To identify the drivers of health and ecosystem impacts, and to define targets and indicators, we need to understand both the proximate causes and the root causes of biodiversity loss and health problems

Climate Change

- Major threat to biodiversity and to health
- Creates significant challenges for ecohealth scenario building
- Climate change has the potential to severely impact both health and biodiversity
- Many health impacts as a result of ecosystem change, habitat loss, invasive species, extinction etc

Summary

- Biodiversity is more than habitats and species' – a whole view of ecosystems and ecosystem services, rather than simply "flora and fauna" or "ecology", must be considered
- Biodiversity is more than habitats and species' – a whole view of ecosystems and ecosystem services, rather than simply "flora and fauna" or "ecology", must be considered
- Inclusion of ecosystem services in strategic planning processes – local, national, regional, international programmes on health, development and conservation
- Integrating biodiversity and health indicators – requires open minds, communication, education and co-operation

PRESENTATION 5

Adding Biodiversity Value in AONB's

Paul Esrich Malvern Hills AONB & Andrew Nixon, Wye Valley AONB

What is an Area of Outstanding Natural Beauty (AONB)?

- A nationally important area of countryside
- AONBs are equal in landscape value to National Parks
- AONBs and National Parks enjoy the same level of planning protection under the law

AONB Purposes

- The primary purpose of AONB designation is to conserve and enhance natural beauty.

'The natural beauty of AONBs encompasses everything – 'natural' and human – that makes an area distinctive: geology, climate, soils, plants, animals and communities, archaeology, buildings, the people who live in it, past and present, and the perceptions of those who visit it.'

AONB Partners (Malvern Hills):

- **Local Authorities**
Worcestershire County Council, Herefordshire Council, Gloucestershire Council, Malvern Hills District Council, Forest of Dean District Council
- **Community Representation**
Herefordshire Association of Local Councils, Worcestershire Association of Local Councils
- **Statutory Agencies**
Natural England, English Heritage, Forestry Commission
- **Non-Statutory Bodies**
Campaign to Protect Rural England, National Farmers Union, Country Land and Business Association, Visit Herefordshire, Herefordshire and Worcestershire Earth Heritage Trust, Farming and Wildlife Advisory Group, Local Access Forum
- **Very significant others**
Malvern Hills Conservators, Communities, Landowners

Malverns Heritage Project

- 3 year project?
- Funding from Heritage Lottery Fund and many others
- Administered by the AONB Unit
- Based on an inclusive and partnership approach
- Not just about grazing!

High Brown Fritillary

- 'Conservation management of habitat for this species is usually a long-term project.... On the Malvern Hills and Eastnor Park there has been a long period of concerted effort by land managers to create and maintain potential High Brown Fritillary habitat. The greatly increased numbers of adults seen this year would seem to indicate the overall success of recent management.' *Butterfly Conservation Report No. S07, 2007*

Wye Valley AONB

Key Facts:

- 3 Year project focussing on the 900ha Wye Valley Woodlands Special Area of Conservation (SAC)
- A total of £1.3 million EU LIFE-Nature programme split between the Peak District and the Wye Valley
- AONB Unit coordinated local operations and administered the funding

Threats to Wye Valley Woodlands

- Change from coppice to high forest
- Lack of infrastructure for modern extraction of timber rather than coppice
- Conifer plantations and invasive 'alien' plants such as sycamore
- Increasing deer numbers; browsing regeneration & bark stripping
- Issues of co-ordinated management and information / data
- Lack of public awareness of significance of Wye Valley woodlands

WoodLIFE actions in Wye Valley

- High Forest Management, including uneconomic thinning and improved extraction tracks
- Coppice restoration and repollarding ancient trees
- Removal of conifers and sycamore
- Deer Management, including surveys, control and fencing
- Monitoring of bats and Dormice, and provision of Dormouse boxes
- Surveys of veteran trees
- Collation & sharing of digitised data
- Published leaflets on deer & squirrel management and Woodlands of the Lower Wye booklet, on origins, history and management of Wye Valley Woods

Wye Valley AONB Veteran Tree Survey partners

- Natural England, Defra, CCW, Herefordshire Rivers Leader+ programme, Wildlife Trusts, Welsh Assembly Government

The importance of veteran trees

- Important contribution to the landscape
- High biodiversity value
- Cultural and historical links
- Locally high concentrations

Aim of the survey

- Systematically record the AONB area
- Produce a dataset (atlas) of veteran trees and their associated features
- Engage local communities in the survey effort
- Promote the value and profile of veteran trees locally

Results

- 32 volunteer surveyors recruited and trained
- Over 2000 trees recorded
- 'Significant Finds'- ancient wych elm measuring 7.5 metre girth
- Created an important information resource for future surveyors
- Enabled funding to be secured for tree management

Concluding points

- AONBs are governed by strong partnerships supported by a small team of staff
- AONBs rely on the goodwill of partner organisations, landowners and local communities to effect change on the ground
- AONBs belong to everyone, we want to work with you to keep them outstanding
- AONBs can be the test areas for initiatives that can be replicated in the wider countryside

PRESENTATION 6

The Herefordshire Dimension

Bill Bloxsome, Conservation Manager, Herefordshire Council

Introduction

- Why biodiversity is important to Herefordshire and the pressures upon it
- Identification of the issues and actions being undertaken by a range of organisations – public, private and voluntary
- Show how this fits into the wider purposes of sustainable development

Brown trout *Salmo trutta morpha fario*

- Each worth £1,000 to Herefordshire's economy
- Related to salmon - which is worth 10 times. Stocks dropped by 50% over past 30 years or so. Picture for river Wye suggests even more alarming – dropped to only 5% of mid 60s levels

Wye valley

- River Wye gorge at Symonds Yat
- The quality of the river landscape is a combination of habitat and geomorphological features
- Value of tourism to county's economy - £335k - biodiversity contributes significantly to this

Agriculture

- Historically cattle have been important to our important grassland habitats

Grassland - in 1977 grasslands covered some 3% of the county

- In 2004 there were 852 holdings with beef herds and 223 with dairy herds in the county
- Information on numbers since then is not available for the county but anecdotally there is the suggestion that herds have shrunk significantly – for example suggestion that dairy herds number down to just 20% of 2004 figure
- We now estimate that we have lost over 80% of the important grassland habitat over the past 30 years
- Additional pressures now to be faced in our lowlands from the need for farming to diversify and increasing grain prices

Orchard - another important Herefordshire habitat is our orchards. There are good examples of traditional orchards still present, although they are at threat from several factors

- Cider makers, in particular Bulmers are a significant employer
- Move to modern bush orchards – but they still have biodiversity value

Woodland - another habitat that reflects the landscape character of the county is our woodlands

- Cover some 25% of county
- Estimated that 40% of England's woodlands are under managed – could release 2 million tons of wood per annum on a sustainable forestry basis. (Logs, woodchip and pellets)

Upland - our upland habitats also contribute to the county's economy

- Malvern Hills a prime example
- Attract many walkers who like to walk them

Black Mountains and across Olchon valley has a rich pattern of important grasslands and hedgerows. From This You Can Discern Herefordshire Has An Array Of Landscape Features With Their Associated Habitats Starting From Valley Bottoms With Their Rivers And Streams, To Grasslands, To Orchards, To Woodlands And Finally Uplands. Within Each Of These There Are Variations.

- **BAP schedules** - how do we go about conserving our wildlife – meeting our duty to ‘have regard’. Good starting point is our biodiversity action plan. Currently being revised and have 22 HAP’s and 17 SAP’s
- **Managed green space action plan** – we do have a HAP covering managed green space. Hereford’s designation as a growth point and the pressures this will create upon our urban green space will have impacts on this habitat within the county

Rivers and streams HAP

We have a HAP for rivers and streams, will remain following the recent revisions

- **Rivers designations**
 - Importance recognised through a range of national and international designations
 - Works to counter problems include Wye and Usk foundation on the river Lugg and Game and Wildlife Conservation Trust on the river Monnow – clearing and fencing off some of the river margins, providing fish passes on weirs, enabling salmon and brown trout to breed further up the rivers
- **Water vole** – in the TV programme ‘saving planet earth’ you will have seen Toyah Wilcox talking to people from the Game and Wildlife Conservation Trust who were releasing water voles into the river Monnow in Herefordshire
 - Water voles have been under threat in the UK for a significant number of years and its numbers have dropped by 90%. This has been caused by the loss of habitat, pollution and in particular the predator mink
 - The species action plan involves a co-ordinated approach involving pest control and habitat improvement so that there can be a re-introduction programme for the water vole. The range of actions also includes maintaining colonies, halting the loss of habitat, increasing habitat around known sites, bank side management as well as controlling mink.
 - The Local plan lead is the Environment Agency
- **River recreation**
 - Rivers offer significant opportunities for recreation and exploration
 - As part of their work on the rivers Lugg and Arrow and working with the Environment Agency the Wye and Usk Foundation has undertaken the Lugg salmon home coming project. They have worked with local primary schools to study the life cycle of salmon, look after some baby salmon and release them into local rivers where obstructions have been removed
 - This builds on work they did in Wales that proved to be very successful in getting young people interested in the biodiversity of our rivers
 - However rivers can have their dangerous side and the possibility that floods will become more prevalent is one of the potential consequences of climate change
- **Grassland types** – many are lowland habitats but not all and they are important to supporting a range of species
 - Not surprisingly there are a number of initiatives that affect grassland habitats underway
 - HNT involved in both a community commons project and are also managing areas of grassland in the Woolhope Dome
 - Caring for Gods Acre may be tackling small parcels of grassland but it all counts and these are exemplars for what communities might do throughout Herefordshire
- **Wetlands** can make a useful contribution to flood alleviation
 - An existing example of where wetlands are being developed as part of a comprehensive approach to river management is the Severn and Avon Vale wetlands project, which is looking to develop a network of wetlands along the waterways. One of its objectives is *‘to fully integrate the objectives and benefits of wetland creation into floodplain and water resources management policies, strategies and practices’*
 - Herefordshire Nature Trust is developing a wetlands vision mapping for the county responding to a predicted increase in flooding while realising the opportunity to

enhance habitats as well as reducing the social impacts of flooding. In this they are working with EA, NE, HC, RSPB and FWAG to develop a funding bid.

Orchards HAP

Traditional orchards are now a national priority habitat but they have been recognised as a biodiversity resource in Herefordshire for a lot longer. Here in Herefordshire, all orchards are considered for their important contribution to the counties biodiversity. Biodiversity Partnership working with Bulmers, FWAG, HNT, NE and the Sustain project.

- **Noble chafer** – the nationally rare noble chafer beetle has been found in several of the traditional or older orchards within the County
- **Orchard good practice guide** – Co-operation project led to good practice guide being produced, Leader + funding amongst others. Herefordshire Orchard Community Evaluation project one of the contributors to the guide
 - Herefordshire Orchard Community Evaluation project based with the Bulmer foundation – triple bottom line accounting
 - Looking at 4 environmental effects – biodiversity, soils, water, carbon footprint
 - 3 economic factors – farmers profit, contribution to local economy, impact on tourism
 - 3 social – agreed with local community
- **Apple varieties**
 - How will climate change affect the varieties we can produce?
 - Will we be able to grow other fruits that at present we can't?

Woodland HAP

Just one of a number covering distinctive habitats found in the county

- **Moccas Park** - Wood pasture and parkland at Moccas park - Grassland + Pasture shows complex interaction between woodlands, grasslands, corridors and important species and their movement
- **Queenswood recreation** – Queenswood country park nearly 35,000 visitors per annum – managed by our parks leisure and countryside service – SSSI, arboretum, visitor centre
- **Estate woodlands**
 - A woodland that has been felled and restocked a number of times
 - Beneficial impact on climate change
 - FC to carry out a feasibility study looking at the Woolhope Dome and its ability to produce woodfuel at end of year

Types of uplands for which we have HAP's – all three types can be found in the Black Mountains that lay on the county's border albeit the major part being in Wales.

The black mountains sheep and wildlife enhancement scheme (SWES) is a sort of international co-operation project between England and Wales involving NE, CCW, Brecon Beacons National Park Authority, and local commoners association.

- **High brown fritillary** upland species issue with a SAP - NE has undertaken a considerable amount of work with the AONB and Malvern Hills conservators through clearing some of the scrub invasion
- **Worcester beacon** Malvern Hills – recreational pressures have been long recognised as a problem
- **Hatterall ridge** (boundary between England and Wales – Offa's dyke – upland heath). Possible climate change for biodiversity:
 - Species encroachment - seen on Malvern Hills but may not necessarily reflect climate change – but an example of what might happen
 - Increasing run off leading especially to erosion or destruction of habitats
 - Warmer weather might increase recreational use of uplands – again affecting the balance presently seen in some of the less frequented areas

Managing council land

- In addition to our rivers HC also own or manage other areas of land with designations such as local nature reserves such as Broadmoor common
- Protected species – e.g. Otters, bats and great crested newts
- N1198 – management of local sites – in our local area agreement for moment – something we have to improve upon
- Most pertinent though is another indicator included in the corporate plan. That is '*land without a nature conservation designation, owned of managed by the local authority, and managed for biodiversity purpose*'
- **Hereford cemetery** the grassland was there all the time and simply revealed when the cutting regime was altered – or reduced – saving money to spend of biodiversity elsewhere. John gibbon, the bereavement services manager has many more ideas of what he wants to do, including rolling out a programme to other council cemeteries, the Biodiversity Partnership Co-ordinator is continuing to give him the technical advice to help him realise his ideas
- **Education sites** schools are another area where land can be and is being managed for biodiversity. Many schools have set aside areas as an educational facility – such as here at Bristow school, Ewyas Harold and also Trinity school in Hereford. These are just a few that are contributing to the corporate plan indicator
 - 40 schools have been surveyed to date
 - They now have schedules for their management and Eric Lane from property services is continuing to expand such schedules with the assistance of Nicky Davies

It is also hoped the extend management practices to cover margins around playing fields for example:

Other council land

Others being covered as listed complete the list – we don't own any housing. Audit commission library of local indicators

- Parks and open space – the Countryside Service manage Bodenham lake;
- Commons – those that we own that is owned by the Local Authority.
- Smallholdings – where we have a significant amount of land under stewardship - this bolsters our figures considerably; and
- Highway verges – where presently we manage what we call 'roadside nature reserves' but where there is a great deal of scope to go further provided highway safety is not compromised

Planning framework another key area of LA activity - land use planning or now known as spatial planning

- Emphasis at start of process on evidence base
- Emphasis at end of process on monitoring
- 1 app. – local requirements – biodiversity surveys and reports
- Compliance with habitat regulations – licensing
- Hereford growth point – studies as listed

Another iconic item finally just a reminder to us all another sustainability icon – lest we forget there is something they say about 'familiarity'

PRESENTATION 7

Parish Councils: Grass roots delivery of the NERC Duty

Ellie Seaborne, Conservation Officer, BBOWT

Subjects covered

- Why Parishes are important
- The NERC Duty and Parish Councils
- What BBOWT has done
- Examples of NERC driven change/action
- What we will do next

Are Parishes Important?

- Parish councils are the first level of Government
- Numerous responsibilities set out in law
- Parish Councils can heavily influence the future of their area...
- Parishes contain the people that care and the manpower to act...
- Parish level engagement is the grass routes end of delivering real biodiversity gains on-the-ground...
- So yes, they are incredibly important!

NERC & Parish Councils

- Section 40 – the Duty to Conserve Biodiversity:
‘Every public authority must, in exercising its functions, have regard....to the purpose of conserving biodiversity’
- In defining a ‘Public Authority’ the Act includes Parish Councils (including Town Councils and Parish Meetings)

“...conserving biodiversity.”

- Biodiversity = Wildlife!
- Conservation – does not just mean preventing loss of an existing resource, it also means restoring and enhancing it!

“... in exercising its functions...”!

- The Act does not impose any *new* functions on Parish Councils
- Parish Functions are many and varied ...

Planning applications

Parish Councils have the right to be notified of planning applications affecting land in their Parish (T&CP Act 1990)

Questions they/you can ask:

- Will the proposal result in harm to wildlife?
- Can it contribute to benefits for wildlife?

Parish Plans - What BBOWT have done

- No DEFRA guidance in October 2006
- So ... BBOWT decided to produce our own and publicise through a campaign

Stage 1 – the Flyer...

Stage 2 – the guidance...

Stage 3 – a bit of publicity

Stage 4 – walks, talks and presentations

Some examples

- Ongoing requests for guidance and talks

- Parish Councils requesting walks, talks and surveys
- District Council in-house ecologist
- Banbury Town Council
 - 150+ owned/managed green-spaces
 - Desire to 'get greener'
 - Three sites prioritised
 - Overarching biodiversity vision for all 150 sites

What we will do next

- Continuing to work with partners to give presentations, talks and access to information
- Work with Partners to deliver measurable results before the 2009 DEFRA review
- Re-visit the Parish councils that initially requested guidance
- Any more ideas?

Guidance and training

'A Duty to Conserve Biodiversity: A Guide for Local Authorities in Berks, Bucks & Oxon'

'Parish Councils and the Duty to Conserve Biodiversity: Guidance on the Implications of the NERC Act 2006' <http://www.bbwt.org.uk/content.asp?did=23482>

Delivering Biodiversity Duties for Public Bodies: NERC Act 2006'

Oxford University Department of Continuing Education April 9th

<http://cpd.conted.ox.ac.uk/env/courses/NERC%20Biodiversity.asp>

PRESENTATION 8

Contracts for Wildlife: Bringing Colour and Diversity to Roadside Verges and Roundabouts Chris Jones, Telford & Wrekin Council

What factors promote originality in British Urban Plantings?

NEGATIVE FACTORS

HORTICULTURAL DEGRADATION

- Reduced grounds maintenance budgets
- Contract documentation
- Fall in horticultural skills

NON-SUSTAINABLE

- Bedding plants
- Pesticide usage

COST/FINANCES

- Prohibitive cost of large scale traditional bedding schemes

MAINTENANCE

- Time/labour constraints

POSITIVE FACTORS

AWARENESS OF NATURE

- Planting to benefit wildlife
- People want to co-exist with nature

RESEARCH

- Sheffield – annuals and herbaceous perennials

EDUCATION

- Media/publications/seminars etc
- Public expectations

IMAGINATION

- Dynamic staff not afraid to affect change
- Influence user groups

How Have These Factors Influenced Change in Telford & Wrekin?

LANDSCAPE EVALUATION

- Shrub are equivalent to 80 football pitches > 30 years old
- Very extensive areas of amenity grass
- Monotonous drifts of daffodils in spring

NEED TO INTRODUCE ...

- Interest, colour and variety whilst providing habitats to encourage mammals, birds and insects

Our Alternative Vegetation Types Are...

- Ecological but not always native
- Uses cultivated plants but appears spontaneous
- Urban with no apparent order
- Ecological but not always 'green' or 'organic'

Department of Landscape, University of Sheffield

What are the new “meadow” vegetation types going to be in Telford?

- Annual meadows
- Native meadows
- Exotic perennial meadows

- Enhanced bulb areas

Annual Meadows

Today 1.4 hectares of annuals, parks and roundabouts

Native Meadows

- Composed of British native species - “traditional hay meadows”
- Predominantly suited to roadside verges & central reservations
- Essential to mechanise maintenance to minimise cost
- Valuable wildlife corridors

Method of Creation

ESTABLISH SUITABILITY OF EXISTING VERGE

- Size - wide verges give better impact and are easier to maintain with machinery. Leave mowing strip for visibility & textural contrast.
- Existing flora - start with weedy amenity grass!!!
- Site - wet & very dry sites make better meadows owing to more grass “stress”

AMEND MOWING REGIME

- One cut per year
- When?
- Two stage operation - flail then flail collect
- Cut to scalp grass
- Overseed or plug plant with additional species if required

Exotic Perennial Meadows

- A new concept in amenity planting?
- A progression from annuals on roundabouts
- Two distinct types
 - Perennials without grass
 - Perennials with grass

Perennials Without Grass

- Developed by Landscape Dept - University of Sheffield
- Established from seed
- Includes some annuals for colour in first year
- Perennials knit together to provide colour from second year
- Additional perennials may be added by plugs
- Minimal maintenance

Perennials With Grass

- New concept for Local Authorities
- Establish species rich grass meadow - no ryegrass!!!
- Perennials introduced by 9cm plugs
- Perennials must be “thugs” - able to withstand grass competition and effective at suppressing weeds
- Essential to use perennials with slug resistance

Benefits...

- Offers colour & interest in the form spontaneous “Prairie style” vegetation
- Minimal input - not herbaceous borders!!!
- Mechanised operation - designed to be cut by flail collector once per year
- Offers opportunities for underplanting with bulbs
- Reduced herbicide input once established
- Provides nectar & shelter for wildlife

Enhanced Bulb Areas

- Bulb areas which can be turned into native or exotic meadows through additional planting
- Often rich in wild flower species
- Do not cut daffodil foliage 6 weeks after flowering!!!
- Delay cutting until mid-late Summer
- Additional plug planting of natives / exotics in Autumn
- Bulbs provide colour from February to May...

SOME COMMENTS GIVEN BY DELEGATES ...

- As a relative outsider, this was a very useful overview of the legislation and its implications and it provided many useful ideas
- Few delegates from planning dept
- A good event, well organised
- Excellent diversity of speakers, lots of very useful information.
- The buffet lunch was superb – an excellent selection for vegetarians
- Lunch good but lacked vegetarian!
- Excellent day
- Wholesome & stimulating
- Lighting made some of the screen difficult to see. Maybe dedicated lighting over the presenter only would be an improvement
- Brilliant day
- A diverse & exciting programme for what could potentially be a dry subject
- I thought the conference was really good, great speakers, well-attended and great venue.
- Very mixed quality and level of presentations. Great day, thank you, lots to think about

FURTHER INFORMATION

Natural Environment & Rural Communities Act 2006

The primary purpose of the Natural Environment & Rural Communities Act is to implement key aspects of the Governments Rural Strategy (2004)

The Act establishes both Natural England, an independent body responsible for conserving, managing and enhancing England's natural environment, and the commission for Rural Communities, an independent advocate, watchdog and expert advisor for rural England. It also reconstitutes the Joint Nature Conservation Committee and renames and reconstitutes the Inland Waterways Amenity Advisory Council.

Section 40 of the Natural Environment & Rural Communities Act requires that 'Every public authority must, in exercising its functions, have regard, so as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. It should be noted that the NERC Act supersedes and replaces Section 74 of the Countryside & Rights of Way Act.

<http://www.opsi.gov.uk/ACTS/acts2006/20060016.htm>

Defra Guidance for Authorities on implementing the Biodiversity Duty.

- Local Authorities: <http://www.defra.gov.uk/wildlife-countryside/pdfs/biodiversity/la-guid-english.pdf>
- Public Authorities: <http://www.defra.gov.uk/wildlife-countryside/pdfs/biodiversity/pa-guid-english.pdf>

Highways Agency

- www.highways.gov.uk
- www.standardsforhighways.co.uk

AONB's

- Malvern Hills: <http://www.malvernhillsaonb.org.uk/>
- Wye Valley: <http://www.wyevalleyaonb.org.uk/pages/index.asp>

Telford & Wrekin Council

- <http://www.telford.gov.uk/>

THE Commission for Architecture & the built Environment (CABE)

- <http://www.cabe.org.uk/>

CoHab

- <http://www.cohabnet.org/>

BBOWT

- <http://www.bbowt.org.uk/content.asp?did=23482>

ALGE

- <http://www.alge.org.uk/>

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