



Llyn y Fan Fach

Strategic Objectives

The sections in Chapter 7 set out the strategic objectives for the Brecon Beacons National Park. They indicate the steps needed to achieve the long-term vision for the Park. They provide a 20-year framework which guides decision-making and management of the Park for the BBNPA and its partners. As such, the strategic objectives provide context for other Park plans and strategies designed to attain realistic outcomes over the short- to medium-term, including the five-year prioritised action plan (see Chapter 8).

For simplicity, each of the strategic objectives is grouped into similar resource management topics, for example Biodiversity or Sustainable Tourism. Whilst considerable overlap among the disciplines exists when it comes to on-the-ground implementation, this grouping allows for a simplified explanation of each topic's relevance to park management. Related strategic objectives are cross-referenced where appropriate. Resource management topics are broadly organised according to their corresponding statutory purpose or duty. In this instance, the Park's purposes and duty have been abbreviated to provide titles for the major subdivisions of this chapter as follows:

- **7.1 Conserving and Enhancing the National Park;**
- **7.2 Understanding and Enjoying the National Park and;**
- **7.3 Economic and Social Well-being of Local Communities.**

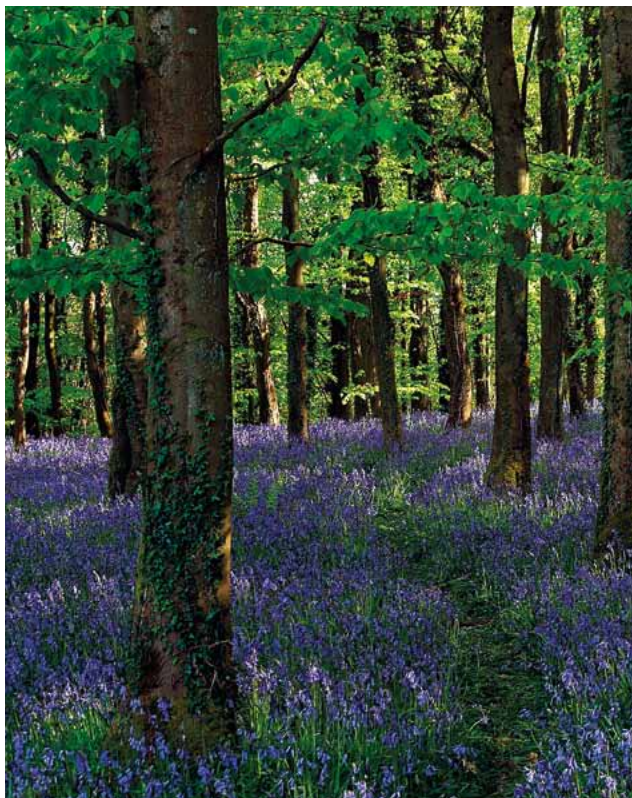
Each subsection includes a brief introduction to the topics, context and key issues, relevant strategic objectives with explanatory text and cross-references to other topics covering similar issues. The predominant international, national and regional policies associated with each topic in Chapter 7 are listed in Annex 7.

7.1. Conserving and Enhancing the National Park

This section identifies strategic objectives directly linked to the National Park's first statutory purpose: conserving and enhancing the natural beauty, wildlife and cultural heritage. Collectively these objectives describe a framework for long-term, sustainable management of the National Park's natural and cultural resources, leading to the conservation and enhancement of the Park's special qualities. The objectives incorporate the guiding principles set out in Chapter 6 with the aim to address the key issues facing the National Park in the foreseeable future described in Chapter 5. Whilst the focus of each objective in this section relates directly to the first purpose and more specifically to the topic being discussed, consideration has been given to the interrelationships that exist with and among the strategic objectives in this section and those covered by the second purpose (see Section 7.2) and duty (see Section 7.3). Long-term management of nature and culture cannot be done in isolation; it is inextricably linked to communities and economic factors, and continued understanding and awareness of what people consider special about the Park.

7.1.1. Landscape

The character of a landscape is made up of many layers - geology, vegetation, field and settlement patterns, buildings and historic and cultural associations. The landscape of the Brecon Beacons National Park comprises a patchwork of farmed countryside, extensive common land, prominent hilltops, lakes, canals and meandering rivers punctuated by small-scale native woodlands, country lanes, hedgerows and stone walls, and scattered settlements. Together these physical features of the landscape (or "tirwedd" in Welsh) create a harmonious picture of the landscape, known as "tirlun" in Welsh. Most people come to the Park to experience the tranquillity and natural beauty imparted by the Park's diverse



Top: Hay Bluff, Black Mountains

Above: Bluebell wood

landscape features - both physical and artistic. The quality of the Park's landscape contributes to the quality of life for both residents and visitors.

The landscape and its constituent layers are constantly changing, under natural and human influence. Fewer farmers manage the countryside. The climate is changing. Rivers meander. Whilst change is inevitable, the UK Government regards the National Park designation as conferring the highest status of protection as far as landscape and scenic beauty are concerned.¹⁷ Under the Wildlife and Countryside Acts, a Section 3 Conservation Map (see Map 5) of mountain, moor, heath and woodland was prepared to delineate areas considered particularly important to conserve. Additionally, CCW have developed a landscape characterisation tool - LANDMAP - for the whole of Wales (see Map 9). This geographical information system assists the BBNPA and its partners in defining and monitoring spatial and temporal changes to the Park's visual and sensory, habitat, geological, cultural and historic landscape elements. LANDMAP data will not only provide a strong evidence base for the Local Development Plan but will also inform the development of a landscape strategy aimed at conserving the Park's special qualities.

Whilst the Park and its resources are protected for everyone's benefit, the land is owned and managed by many different individuals and organisations. Consequently, conservation and enhancement of the landscape - and its special qualities - are reliant upon collaboration among these key stakeholders. The Park's stakeholders, therefore, are presented with the challenge of encouraging desirable change and discouraging undesirable change where possible. This requires a clear distinction between desirable and undesirable change. This Management Plan is designed to assist with this process.

17. WAG. Planning Guidance (Wales) Planning Policy First Revision para. 5.3.6.

Case Study

Walls of Llangynidr

Mountain walls are an important feature of the mountain scenery of the Brecon Beacons National Park, separating common grazing from in-by-land. Such walls form an important and striking element in the landscape, providing testimony to the industry of those who worked the land in the past. Dry stone walls are now too expensive and time consuming for farmers to maintain. Many stretches have become piles of rubble with the gaps filled with wire or a hurdle. In some places, the wall has been removed, the stone sold for building and replaced by a wire fence.

Walls of Llangynidr (WOL) was started in 2000 as a village millennium project to try and save the mountain dry stone walls in the community of Llangynidr. Working in partnership with the Llangynidr Community Council, the Dry Stone Wall Association and BBNPA, Walls of Llangynidr was formed with two major aims. The first is to rebuild and replace fallen mountain walls and the second to provide training in the craft of dry stone walling.

Since 2000 Walls of Llangynidr has been funded by local trusts and the Sustainable Development Fund administered by BBNPA and has been able to rebuild 800 metres of dry stone, mountain wall using qualified wallers. Criteria have

been carefully designed to identify which stretches of walls to work on and these include checking that there is enough stone nearby to rebuild the wall, selecting walls close to public footpaths with ecological and environmental value, and establishing the support of the local farmer or landowner.

Walls of Llangynidr has provided week long courses in dry stone walling for over 100 trainees under the direction of professionally qualified instructors provided by the South Wales Branch of the Dry Stone Wall Association, creating a local resource of qualified wallers at initial, intermediate and advanced level.

In 2007 Walls of Llangynidr became part of the Brecon Beacons Park Society. This new partnership provides the opportunity to work on a larger scale within the Park. From the outset it was the intention of WOL to act as a pilot project. Now it is hoped to spread the ideas to other communities within the Park. Spreading the ideas of WOL will have two major consequences: it will unlock funding for wall restoration and training, and it will give increased impetus for a Park-wide strategy on the management of natural stone, including increased support for the protection and restoration of dry stone walls. It will also set clear policy on the sustainable use of stone within the Park.



Strategic Objectives: Landscape

1. Conserve and enhance the sense of tranquillity, peace and remoteness experienced throughout the National Park.

Peace and tranquillity and qualities of remoteness are consistently cited as the primary reason people come to visit and live in the Brecon Beacons National Park. Yet, there are a variety of challenges to the Park's foremost set of special qualities, including: illegal use of mechanically propelled forms of recreation, low-flying aircraft, continued development, electricity lines and pylons, moderate increases in light pollution, increasing numbers of visitors and encroaching wind farms. These qualities are difficult to measure and monitor, though tranquillity mapping has been conducted in England (CPRE, 2005). Management of this as a special quality will need to take account of spatial issues, identifying areas best suited to “honey pots” or “adrenaline” activities as opposed to areas that are managed principally to conserve and optimise the sense of tranquillity. Data are lacking for the Park, though CCW are developing a tranquillity map for Wales. Once this information is available at a suitable scale, it will improve understanding and management of this landscape with these special qualities in mind.

2. Conserve and enhance the beautiful and varied character of the landscape via sustainable, integrated management.

Landscape change will be encouraged to benefit the Park's biodiversity, geodiversity, built environment, local economy and cultural heritage. Links between landscape, biodiversity, energy, historic environment and culture are important, but the landscape is more than the sum of its parts. Its elements must be managed as a whole, recognising that landscape changes are linked to changes in a variety of management arenas, particularly agriculture, woodland and upland management. Likewise, what may

be considered an important management focus in one part of the Park may not be of concern in another. Change should be managed to conserve the landscape and special qualities of the Park without managing the Park as if it were a snapshot in time and space. To be successful in these efforts, landscape character will need to be assessed across the Park to establish a benchmark and then monitored periodically to ascertain changes – desirable and undesirable – that may occur. CCW's LANDMAP tool will aid in this effort. Management decisions should be based on this information and management plans designed to benefit the processes which conserve and enhance the Park's diversity of special qualities.

3. Prevent degradation of the Park's landscape and enhance derelict land.

Portions of the Park's landscape have been degraded by illegal use of mechanically propelled vehicles, litter and fly-tipping, abandoned vehicles, poor management of brown field sites, the erosion of upland paths and sometimes by road works and development. Other elements affect the landscape value and sensory quality associated with the landscape such as development – within and outside the National Park. Measures should be taken to minimise these types of activities where possible and improve sites where appropriate. However, enhancement work should not be at the expense of wildlife or industrial archaeological interests.

4. Develop understanding and awareness of landscape's varied character and the processes that influence it.

The Park's beautiful and diverse landscape is dependent upon the continued interaction of natural processes and human influences. The importance of this relationship is enshrined in the Park's designation as an IUCN Category V landscape. There is a need not only to carry out the management of the National Park with these interactions

in mind but also to improve the public's understanding of this dynamic landscape so that they may better enjoy it and care for it. It is through the long-term support and active participation from the Park's stakeholders that the landscape will be conserved. This support requires people to understand their connection to the world around them and how they may influence it both positively and negatively. This understanding, of course, only comes from the continued engagement of the public by the BBNPA and its partners.

CROSS-REFERENCE

- 7.1.4 Historic Environment
- 7.1.5 Built Environment
- 7.1.12 Farming
- 7.1.13 Woodlands
- 7.1.14 Uplands
- 7.2.1 Outdoor Access and Recreation
- 7.2.2 Education
- 7.2.3 Interpretation
- 7.3.2 Sustainable Tourism
- 7.3.7 Military Use of the Park

7.1.2. Biodiversity

The conservation of biodiversity is of critical importance to the Brecon Beacons National Park. Whilst geological processes have sculpted the land forms, this is clothed in a mix of natural and semi-natural habitats that contribute to the landscape character of the Park. From the wide perspective of the open uplands to the tiny details of the ferns and mosses that cling to rocky stream sides, biodiversity binds together all that the Park is and how it is perceived, valued and enjoyed.

A number of sites within the National Park have been further designated for their important biodiversity. There are 76 Sites of Special Scientific Interest (including those designated for Earth Science features), 11 Special Areas of



Craig y Cilau National Nature Reserve

Conservation and 7 National Nature Reserves. In some cases a site may have all three designations, though not necessarily with the same boundaries (see Map 6). These designated sites represent the best examples of habitats and species populations within the National Park. The biological resources contained in these sites and throughout the rest of the National Park are described more fully in the Park's Local Biodiversity Action Plan.

Whilst these designated sites form a core network representing the best examples of both habitats and species, they cannot maintain important biodiversity in isolation. Loss of habitat and the fragmented distribution of remaining habitats are key challenges to address.

Species are intimately linked together through the complex relationships that build ecosystems, and so a broad vision must be applied to the management of biodiversity. This landscape-scale approach accommodates entire ecosystems and is essential to providing a robust and functional natural



Kingfisher



Pipistrelle Bat



Otter



Hazel Dormouse

environment in which wildlife can thrive. This approach facilitates management of biodiversity at multiple scales, particularly habitat connectivity. Habitat connectivity enhances biodiversity by removing barriers to species movements, expanding habitats and ensuring important sites are not isolated; it increases the opportunities for biodiversity to move and flourish within surrounding farmland, forestry and settlements.

A thriving biodiversity resource provides numerous benefits to the National Park. Agriculture relies on soil formation, water flow and pollination, all provided by functioning ecosystems. The uplands play a significant role in water storage and release, providing a natural defence against both drought and flood. Biodiversity also provides enjoyment and recreational opportunities. All of these services either contribute to the social and economic well-being of the Park, or would otherwise be prohibitively expensive to replace.



Sundew



Purple Saxifrage

Strategic Objectives: Biodiversity

1. Utilise a landscape-scale approach to biodiversity conservation, built on good management of soil, air and water quality.

Soil, air and water quality underpin functioning ecosystems. Poor quality of these basic natural resources will not only affect biodiversity but also agricultural production and human health. These processes operate across large areas of land and are intimately connected. Approaches such as Catchment Sensitive Farming - already implemented by the Environment Agency Wales (EAW)- can deliver wide reaching benefits by tackling root causes of environmental problems. It is essential that a broad vision be taken when managing these resources.

2. Deliver these strategic objectives through partnerships with appropriate bodies including the BBNPA, farmers and farming groups, Unitary Authorities, WAG, Government bodies, community groups, charities, voluntary bodies and recreational users.

The natural systems of the National Park are incredibly complex. With different organisations and individuals responsible for the management of different areas, a coordinated approach must be taken to ensure that the biodiversity resource is effectively managed. It is not possible for any one organisation to deliver these benefits in isolation. Effective partnerships and communication must be developed to ensure different organisations can work together to deliver a shared vision. Sound data on the distribution of habitats and species along with a greater understanding of species requirements, natural systems and socio-economic processes is critical to informing the decisions made by these partnerships. The network of Local Records Centres in Wales helps the partners by storing and disseminating data collected by individuals and organisations.



Common Blue Damselflies



White-clawed Crayfish

3. Integrate effective biodiversity conservation into economically viable agricultural and arboricultural systems.

The drive to produce food and timber has produced a highly modified landscape mosaic but one that provides the economic, social and cultural core of the National Park and the landscape patterns for which the Park is renowned. Semi-natural habitats, particularly grasslands and heather moorland, are mainly by-products of farming and cannot be sustained without this productivity or without livestock grazing. Grazing is not only sustainable but produces better wildlife habitats on many of the upland sites than would be achieved by machines alone. Replacing traditional grazing schemes with vehicular or manual management is often prohibitively costly, impractical and less effective. The skills and knowledge base, built up over generations of land management experience is an irreplaceable resource that will only be sustained by future generations of farmers and foresters. Economic viability of farming systems is essential to the local economy, to local food provision and to successful management of such a large area of land.

4. Maintain the extent and quality of priority habitats and the range and/or population of priority species.

It is essential to recognise that the amount of natural or semi-natural habitat has been greatly reduced over the last century. The point is fast approaching whereby any biodiversity that remains will no longer be sufficient to provide a sustainable future for both habitats and species. What remains today is only a fraction of what was here in the past. To ensure no further loss of biodiversity it will be essential to retain what currently exists. This includes priority habitats and species (i.e., habitats and species of principal importance to Wales).

Beyond simply maintaining the amount of habitat, this habitat must be managed sympathetically to maintain its

quality so that natural processes ensure that the habitat functions as part of a wider ecosystem.

5. Ensure that sustainable management of designated sites maintains habitats and species populations at a favourable conservation status.

As examples of the best habitats and species within the National Park (see Map 6), it is critical to ensure designated sites (e.g., SSSIs, SACs, NNRs) are brought into, or remain, at favourable conservation status. The designations provide the means to ensure that these sites are managed with special regard to biodiversity conservation. Owners of designated sites work closely with CCW to agree and deliver positive management. These sites still need to be managed in a wider context, particularly if the site is large, has a number of owners or associated interests or is dependent on the quality of surrounding, non-designated habitat such as a river. Designated sites can be considered focal sites for developing functional ecosystems at a landscape scale. Their sustainable management can be a catalyst to achieving better habitat condition in the surrounding land. The Environment Strategy for Wales lists targets for the proportion of designated sites to be brought into, or maintained at favourable conservation status.

6. Ensure that non-designated areas across the Park also contain sufficient habitat in favourable condition to provide a high quality, interconnected landscape to conserve and enhance priority species.

Designated sites were selected to represent the most valuable sites for habitats or species populations. Additional, non-designated areas exist across the landscape containing habitats and species populations that are also valuable to conservation efforts even though they have not been designated as such. Just as the designated sites form a network of the most important sites for biodiversity, the wider countryside within the farmed,

forested and urban landscape must support this network. High quality, non-designated sites help to expand this network of biodiversity because they provide additional genetic diversity, safe sites, a wider home range, migration routes and buffers against disturbance and other drivers of change. Sites designated for highly mobile species are particularly dependent on the quality of surrounding land. Natural features such as river corridors and semi-natural habitats such as hedgerows and linear woodlands form vital connections between areas of high quality habitat and are essential for species to move around. Without considering biodiversity across the wider countryside, the biodiversity within the designated sites will decline or become prohibitively expensive to support, especially in a changing climate.

7. Meet and, if possible, exceed the local biodiversity targets for the restoration and expansion of habitats and the expansion of species’ distribution patterns and population sizes.

The UK has drawn up targets for the restoration and expansion of habitats and these also form targets for the Local Biodiversity Action Plan. This is to ensure that enough habitat remains to contribute to functional ecosystems and provide for sustainable species populations. The extent of key habitats needs to be expanded to help reduce fragmentation and restore the previous ranges and populations of target species. Whilst it is an objective to retain existing habitat, this may not always be possible given changes resulting from natural processes or climate change. It may also be desirable to consider the reintroduction of species previously existent within the National Park, or to introduce new individuals to increase the resilience of a dwindling population, as was performed so successfully with the red kite. This would only occur after extensive consultation with stakeholders, Government and conservation bodies.

8. Seek innovative solutions to environmental challenges which integrate biodiversity conservation with education, interpretation, other resource management priorities, and social, economic and cultural sustainability.

There are very limited resources with which to conserve biodiversity. It is, therefore, essential to direct resources toward the causes rather than symptoms of biodiversity loss. For example, biodiversity loss may be the direct result of a lack of awareness or understanding of the issues involved in biodiversity conservation and measures required to sustain it. Investing in education and interpretation programmes aimed at preventing biodiversity loss can be highly beneficial and cost-effective in the long term. As knowledge of natural processes increases, there are opportunities to develop new solutions. These solutions can often provide wider benefits beyond biodiversity gains, such as flood mitigation and retention of soil fertility, both of which have economic benefits. In essence, a collaborative, integrated approach to biodiversity conservation provides greater benefits to a wider audience more effectively and inexpensively.

CROSS-REFERENCE

- 7.1.1 Landscape
- 7.1.12 Farming
- 7.1.13 Woodlands
- 7.2.1 Outdoor Access and Recreation
- 7.2.2 Education
- 7.2.3 Interpretation
- 7.3.1 Sustainable Communities

7.1.3. Geodiversity

Geodiversity is the diversity of rocks, fossils, minerals and soils (see 7.1.10 Minerals and 7.1.9 Soil Resources), land-forms and geological processes that constitute the topography, landscape and the underlying structure of the Earth.

The bulk of the Park is made up of Old Red Sandstone (ORS) rocks, mostly of Devonian age, which extend across its whole width (see Map 3). They form the north and north-east facing escarpments of Y Mynydd Du, Fforest Fawr, Brecon Beacons and the Black Mountains, giving the Park its highest peaks, and also the low plateaux to the north and the high plateaux to the south of these steep slopes.

The older Ordovician and Silurian rocks of Mid Wales are found along the north-western boundary of the Park. These rocks have formed a landscape of southwest to northeast trending ridges and valleys. Overlying the Old Red Sandstone to the south, though usually at a lower altitude due to the dip of the strata, lie the Carboniferous rocks of the northern rim of the South Wales coalfield. Most prominent is a band of limestone, which in places forms a conspicuous escarpment. South of this are Millstone Grit slopes and plateaux, whilst Coal Measures crop out in places along the Park's southern boundary. Other important geomorphological features

include escarpments, waterfalls and gorges, often closely related to underlying geological structures. Evidence of glaciation is widespread, including steep rock faces beneath the northern and eastern edges of the ORS plateaux, sheets of till, bare striated rock, erratic boulders and the moraines both of large valley glaciers such as those of the Usk and Tawe and smaller glaciers that developed in the lee of dip-slope plateaux. Post-glacial features include plateaux and dip-slopes blanketed with peat, river floodplains, landslides/rock slope failures and small alluvial fans.

The Park's limestone exhibits karst features of European significance, including limestone pavements, swarms of shakeholes and some of the longest cave systems in Britain. Some caves are of archaeological or historical significance, and some, along with other geological and geomorphological features, are protected as SSSIs, NNRs and SACs for their contributions to geodiversity and/or for their biological importance. Shakeholes are a common surface expression of cave development below ground, often spectacularly developed in areas where the limestone is overlain by Millstone Grit strata.

The geodiversity of the Brecon Beacons National Park has long been recognised - a situation more recently underlined with the designation of the western half of the Park as



Old Red Sandstone



Cribyn from Pen y Fan

Fforest Fawr Geopark. A key element of this recognition is the interaction of man and nature over the last 7000 years as evidenced in archaeological and industrial archaeological remains across the Park. The post-industrial landscapes of the southern margins of the Park in particular bear considerable witness to the exploitation of natural mineral resources during the 19th and 20th centuries which ensured that South Wales would become a powerhouse of the Industrial Revolution and a major contributor to the industrial growth of Britain. This story is represented at the Blaenavon Industrial Landscape World Heritage Site, part of which lies within the south-eastern boundary of the Park.

Certain rock formations have provided a building stone resource whilst others serve as important groundwater resources, or aquifers. Both require different forms of protection. Some abandoned quarries and restored sites are used for informal recreational activities such as climbing, and mountain biking, but equally they can suffer from unauthorised motor vehicle/motorcycle use and fly tipping. They can provide opportunities for geological research,

education and interpretation. Codes of practice exist for these activities. However, fossil and mineral collecting can damage formations and cause the loss of scientific resources, especially when conducted for commercial gain. For example, similar activities have caused damage to limestone pavements, including their removal for garden decoration. Limestone pavements provide rare and important habitats in addition to being significant geological formations. As with other activities of this nature, they should not be conducted without the expressed permission of the landowner.

Audits of the geodiversity of the region have been undertaken and an assessment of the potential for regionally important geological and geomorphological sites (RIGS) designation is currently taking place across the Park and sub-region. This will inform the production of a Local Geodiversity Action Plan (LGAP) for the Park in the near future.



Central Beacons



Guided walks in the Geopark



Dinas Rock near Pontneddfechan

Strategic Objectives: Geodiversity

1. Conserve and enhance designated geological sites.

Whilst some of the Park's geodiversity is very robust, other parts are more vulnerable to erosion, recreation pressure, mineral working or other forms of use and development. Geodiversity is a significant contributor to the Park's biodiversity and is integral to the Park's landscape and agriculture, which themselves contribute to the quality of life of both residents and visitors.

2. Identify and protect other significant sites of geological importance and/or nature conservation value, such as limestone pavements.

Nineteen geological/geomorphological SSSIs have been identified in the Park covering 15,808 hectares, but identification of second tier sites is less complete, including RIGS. Some geological sites such as limestone features are valuable for both geodiversity and biodiversity and are probably the most vulnerable of the Park's geodiversity features. Limestone pavements and caves can be damaged by plunder, quarrying, pollution and recreation pressures. Shakeholes and sinkholes are often used for dumping.

3. Improve the understanding and enjoyment of the Park's outstanding geodiversity.

The Park's geology and geomorphology create the landscape that so many people come to the Park to enjoy and for which it is nationally and internationally recognised. These geological resources and processes have also shaped, in part, agricultural resources, the Park's biodiversity, the local economy, the built environment, its history, and the regional culture. Without an improved understanding of society's connection to these resources and processes, people are likely to lose sight of their importance and, in turn, damage or destroy them.

The Fforest Fawr Geopark has a significant role to play in delivering this strategic objective by way of its direct involvement with community and business partnerships. A principle component of the Geopark's mission is to improve understanding and enjoyment of geological resources.

CROSS-REFERENCE

7.1.1	Landscape
7.1.2	Biodiversity
7.1.4	Historic Environment
7.1.12	Farming
7.1.13	Woodlands
7.1.14	Uplands
7.2.1	Outdoor Access and Recreation
7.2.2	Education
7.2.3	Interpretation
7.3.3	Fforest Fawr Geopark

7.1.4. Historic Environment

The first purpose of National Park designation was expanded in the 1995 Environment Act to include for the first time the conservation and enhancement of the Park's cultural heritage. "Culture" includes everything that people make or do, and "heritage" comprises everything that was done or thought in the past and which remains today. Those aspects of cultural heritage that consist of the historic environment and built features are covered in this section and the next section (see 7.1.5 Built Environment). Section 7.1.6 Culture and Traditions comprises the intangible aspects of culture: language, literature, music, religion, customs, folklore, crafts, art, people and ways of life.

A vital component of the Park's landscape is its historic depth, manifested by historic landscapes, archaeological sites, parks and gardens and the built environment. The historic environment comprises the material remains of past ways of life. Present day society is the product of past events, and human understanding of that past is a key factor in understanding the present and managing for the future. The

landscape as a whole is a product of past human activity. Patterns of field enclosure or land use, or transport systems like the Brecon-Monmouthshire Canal and its associated tramways, are historic features in their own right, and the individual features - such as megaliths or mottes - which have been the focus of attention in the past are now seen as part of a wider whole. Accepting that the landscape is dynamic and cannot be fossilised, sustainability requires that the necessities of modern life are considered in conjunction with the protection of important historic landscapes and features. As with other components of this living landscape, the Park's historic environment must also be considered within the context of the broader landscape, including the environs outside its boundary.

The Park's historic landscapes are many and varied. Some have been designated for their international significance such as the Blaenavon World Heritage Site, 48% of which lies within the National Park. Some, identified as being of outstanding interest in the Welsh context, with important prehistoric, medieval and industrial elements, are included in the Register of Landscapes of Outstanding or Special Historic



Carreg Cennen Castle



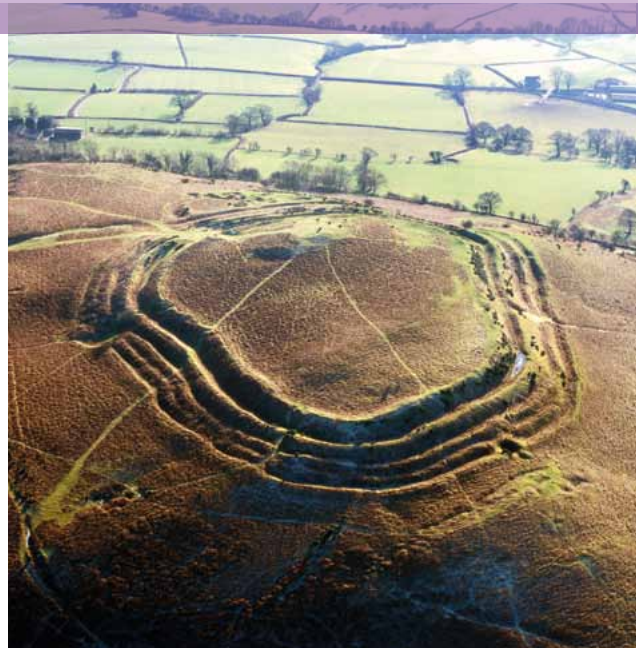
Maen Llia Standing Stone

Interest in Wales. These include: Tywi Valley, Black Mountain and Mynydd Myddfai, East Fforest Fawr and Mynydd-y-Glog, Clydach Gorge, Middle Usk Valley, Brecon and Llangorse, Blaenavon and Middle Wye Valley.

Historic parks and gardens of national importance have been included by Cadw and the International Council on Monuments and Sites (ICOMOS) on a separate register. Registered Parks and Gardens either partly or wholly within the Park are: Abergavenny Priory Deer Park, Abercynrig, Buckland House, Craig-y-nos Castle and Country Park, Ffrwdgrech, Glangrwyney Court, Glanusk Park and Penmyarth, Gliffaes, Hay Castle, Llanfihangel Court, Llangattock Park, Llwynywermod, Penpont, Plas Llangattock, Treberfydd, Trefecca Fawr and Trewyn. More sites may be added to both registers.

Within the landscape of the Park many discrete archaeological and historic sites stand to bear witness to past human activities and traditions. Such important sites range from the Mesolithic period up to redundant industrial remains only a few decades old. Of over 12,000 records for the Park in the Welsh Archaeological Trusts' (WATs) Regional Historic Environment Records, 342 (March 2009) are protected as Scheduled Ancient Monuments (SAMs). SAMs are nationally important designated sites, but not all nationally important sites are scheduled. Cadw provides the main funding for conserving SAMs, but land owners or managers provide the majority of resources spent on their conservation.

The Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) develops and promotes understanding of the archaeological, built and maritime heritage of Wales, as the originator, curator and supplier of authoritative information for individual, corporate and governmental decision makers, researchers and the general public. It maintains the National Monuments Record of Wales (NMRW), the national collection of information about the historic environment of Wales. It funds the Uplands Archaeology Initiative in the National Park and



Pen y Crug Hill Fort near Brecon (©RCAHMW)

across Wales, as well as a national programme of aerial survey. The WATs hold and maintain the regional Historic Environment Records. Through grant aid from Cadw they provide initial information and advice to the BBNPA on the management of the Park's historic environment. The WATs also provide further specialist historic environment information and advice to the BBNPA in its role as a planning authority. The BBNPA and its partners not only seek to prevent damage to features but they also seek to improve monument condition in a proactive manner through land management advice, development control and raising awareness through interpretation and education, as well as by practical conservation work. Educating and involving the public, both adults and school groups, is an important aspect of the BBNPA's work.

The importance of non-designated historic sites which range in form and include many sites and buildings of national, regional and local significance should not be overlooked. Partners should work together to create local lists of non-designated sites and buildings to emphasise the importance of these features of the historic environment. The management of the Park's historic environment should be integrated with other important factors, such as biodiversity and recreation activities. Modern development in and land management of

the historic environment needs to be carefully designed so as not to detract from the sense of place. The continued preservation of the archaeology and historic landscapes of the Park depends on the recognition of these factors, and the adoption of sympathetic management by all those whose activities impinge upon it. CCW's increasing involvement in historic landscapes (as identified jointly with Cadw and ICOMOS), and the Archaeological Trusts' assessments of landscape areas will feed into this process.

The Heritage Protection Bill being discussed by WAG (March 2009) sets out heritage protection reforms which aim to provide an integrated approach towards the management of the historic environment. SAMs, listed buildings, registered parks and gardens and historic landscapes will be brought together into a single register of heritage assets. The Bill will also require Unitary Authorities to create, maintain and/or have access to Historic Environment Records that include all types of heritage asset.

Strategic Objectives: Historic Environment

1. Support and encourage, through partnership working, the development and promotion of a regional strategy for understanding, protecting, managing, monitoring, raising awareness and enjoyment of the Park's historic environment.

A holistic view of the Park's historic environment and the strategies for conserving and interpreting it is needed. This approach should be placed in the context of the Park's surroundings and wider Wales. To be most effective, the strategy must not only focus on protecting the identified resources but also concentrate on enhancing them where possible and promoting their continued enjoyment and understanding. Continued survey, investigation and analysis are required to improve understanding and ensure that what is significant is in the first place recognised and then appropriately managed

for the benefit of residents and visitors to the Park. This strategy would encourage a coordinated approach to management of the historic environment among the variety of partners involved whilst facilitating long term monitoring and data exchange.

2. Protect and manage historic landscapes.

Within the Park there needs to be a unified framework for the management of historic landscapes as a subset of the historic environment, supported by the work of CCW and the Archaeological Trusts.

This framework should lead to the formulation and implementation of management plans targeting the Park's historic landscapes.

3. Protect and manage historic parks and gardens.

Historic parks and gardens are now being given due recognition and should continue to receive increased attention into the future.

Continued efforts should be made to catalogue and assess parks and gardens that are not on existing lists. Effective management and protection therefore require forward thinking. Thus, historic parks and gardens should have management plans which are being implemented. The historic garden at Craig-y-nos Castle is partly in the BBNPA's ownership.

4. Protect and enhance scheduled and designated sites.

“Scheduling” is the process through which nationally important man-made sites and monuments are given legal protection by Cadw.

The number of scheduled monuments reflects those that exist or are known. It does not indicate the state of the Park's cultural heritage. There are many other features in the Park which have not been granted the protection of scheduling. The production of management plans of those monuments owned by the Park and by others

will ensure they are protected and enhanced for future generations. As with the other strategic objectives in this section, provision of information and raising awareness for both residents and visitors is essential to proper management.

5. Seek to protect and enhance, where appropriate, regionally and locally important historic environment features (including historic buildings and archaeological sites) that do not have statutory designation.

The number of scheduled monuments reflects those known sites which have been assessed and recognized as being of national importance and for which scheduling is considered to be an appropriate protection. In addition to designated sites there is a need to address the protection of currently undesignated sites.

6. Seek to manage all sites appropriately, concentrating on threatened and neglected sites/types whilst involving local communities.

Given the large number of sites, the management of individual historical and traditional features must be prioritised, including those previously neglected such as the industrial heritage and redundant churches. Owners/occupiers can assist in meeting the demands of site management. Local residents are often the first to notice when sites are in need of active management, and may be aware of other sites that have not previously been included on any records or registers. Local communities, therefore, can be encouraged to participate in schemes to improve the management of the historic environment and prevent the loss or deterioration of features. Local heritage audits can be used to encourage a sense of place and ownership within the local community. Further support can then be provided for small projects that result.

7. Increase awareness and appreciation of the Park's historic environment through a coordinated programme of public information and community outreach.

Improved understanding of the Parks historic environment is required at all levels within and outside the National Park. This could be achieved as part of an integrated programme of environmental awareness. The needs of tourism and public access, both physical access and access to information, could be met in this way. The important economic benefits of a cherished historic environment need to be highlighted as well as potential adverse impact on the historic environment. Panels, leaflets, web sites and other publicly available information should be integrated with a programme that includes events and active interpretation such as guided walks, self guided trails, workshops, presentations and local research projects. Programmes should target both residents and visitors. Presentation of information through new technologies should be considered (e.g., mobile telephones and downloadable digital data).

CROSS-REFERENCE

- 7.1.1 Landscape
- 7.1.2 Biodiversity
- 7.1.5 Built Environment
- 7.1.6 Culture and Traditions
- 7.1.12 Farming
- 7.1.14 Uplands
- 7.2.1 Outdoor Access and Recreation
- 7.2.2 Education
- 7.2.3 Interpretation
- 7.3.4 Planning and Development

7.1.5. Built Environment

The Park has a wide range of vernacular architecture: Norman castles and mediaeval farmhouses, concentrations of 17th and 18th century buildings within the main settlements and a scatter of very fine rural buildings which often retain original features such as stone tiles, screens and mullioned windows. There are a number of fine country houses on the better farmland in the Usk and Wye valleys, some set within parks and gardens of historical importance. The Park's ecclesiastical architecture is very rich, with Brecon Cathedral, many important mediaeval churches and some early Nonconformist chapels. Changes in building materials (mainly red sandstone and limestone) and differing styles give local distinctiveness to the Park's many farmsteads and cottages, whose original features may be masked by later adaptations.

The pattern of settlements and their character also vary across the Park, from valley to valley. In general, nucleated villages predominate in the east whilst a more dispersed pattern of isolated farms characterises the west. Industrialisation, particularly in the south of the Park, gave rise to 19th century workers' cottages, the canal, a range of mills and other features perhaps better considered as industrial archaeology.

Buildings are protected by being listed by Cadw, by being within one of the Park's four Conservation Areas, or through ownership by bodies such as the National Trust (NT). These criteria for listing emphasise that historic buildings have a "buried" archaeological component as well as a landscape setting, neither of which should be neglected when considering the built environment. There are 1945 listed buildings including 29 Grade I and 86 Grade II* (May 2009). Cadw provides grant aid to safeguard outstanding buildings or for significant works in Conservation Areas but funding is not adequate to assist many listed or unlisted buildings. The BBNPA offers advice and some grant aid, supporting the use of traditional styles, techniques and materials such as lime



Top left: **Church of St Gwendoline, Talgarth**

Top right: **Listed buildings in Myddfai** Above: **Tretower Castle**

mortar, oak window frames and authentic paint colours.

The character of the Park's built environment, in common with the rest of Wales, is threatened by the neglect of listed buildings, small, incremental changes to buildings, the declining use of stone tiles and other traditional local materials, new developments in settlements and the countryside and the loss of traditional uses for buildings such as stone barns. Low farm incomes mean that cash may not be available for repairs. Policies on sympathetic use changes, barn conversions for example, are set out in the Local Development Plan.

It is part of the BBNPA's vision that the Park's irreplaceable historic settlement patterns and buildings are conserved. They represent a diminishing resource visually and culturally, and by their attraction for people, they contribute to the

Case Study

Adfer Ban a Chwm - Revitalise Hill and Valley

Adfer Ban a Chwm - Revitalise Hill and Valley (ABC) is a charitable organisation whose mission is to develop a “creative solution to the dual issues of the need for affordable housing in rural Wales and the vast number of derelict vernacular buildings in the area.”

ABC was set up in June 2008 by Joanie Speers and Roger Mears, who over 30 years have rebuilt a mill and its ancillary buildings in Carmarthenshire. During this time they have seen local stone farm houses and buildings fall into disrepair and slowly disappear from the landscape. At the same time they have seen local people experience great difficulty buying homes in the area due to the high market value and competition from outside the community.

ABC's vision links together community, regeneration, heritage, history, culture, environment, employment and the revival of local building skills. The aim is to purchase at low cost derelict redundant farm houses and associated buildings, rebuild them to high conservation and sustainable standards and sell them as affordable homes (in perpetuity) to local families. ABC is about to undertake a feasibility study with the help of Gwalia, the south Wales housing association, into a pilot building in the National Park to establish whether this really can be done. The ultimate goal is to see this happening throughout the Brecon Beacons National Park, and beyond.

Once these buildings disappear totally, they are gone forever, and take with them their embedded energy and intrinsic value to the community.



Park's economy. Sustainability implies that the heritage of the past is balanced with the needs of present and future generations. In principle, this should involve communities in the design and development of their settlements and surroundings. Where these efforts do not contribute to the degradation of the Park's special qualities, they should explore sustainable methods of re-using or recycling building materials rather than acquiring or quarrying new building materials, and where appropriate investigate the sustainable quarrying of new building materials for conservation projects. Guidance for Sustainable Design in the National Parks of Wales (Spring 2009) will assist these efforts, but a major injection of resources into buildings and settlement conservation and design is also needed.

Strategic Objectives: Built Environment**1. All buildings of listable quality should be listed.**

All buildings of listable quality should be listed to help protect buildings of architectural or historic interest. The completion of the Wales survey in 2005 should have seen the listing of all buildings of architectural interest. This seemingly simple task presents a conundrum. Whilst resurveys have increased the number of listed buildings in the Park by over 400%, there is a lack of a corresponding increase in funding to conserve and enhance them.

2. All listed buildings and their settings should be conserved and their condition improved, concentrating on buildings at risk.

The BBNPA as a planning authority has a duty to conserve listed buildings. To achieve this aim, available funding will be targeted at buildings most at risk. Listed Building condition surveys will be used to enable targeting where it is most needed, giving priority to buildings at risk. Partnership schemes will be sought for major projects through national grant schemes such as the Heritage

Lottery Fund. The BBNPA will also continue to work with CADW to increase the scope of town schemes within conservation areas. As with the other strategic objectives in this section, information gathered from monitoring the condition of the Park's built heritage will be necessary to manage it for future generations to enjoy and will be used for future State of the Park reports.

3. Protect unlisted buildings that contribute to the Park's built heritage.

Protecting the Park's heritage includes the conservation and enhancement of vernacular buildings of archaeological and historical significance. Many unlisted buildings also contribute to the character of the Park's built environment and the character of historic landscapes. The importance that these vernacular buildings play in the character of the historic landscape should also be recognised. The Local Development Plan will include policies designed to conserve this character; but additional innovative methods need to be sought to aid this conservation effort, for example, a comprehensive suite of guidance/advice literature addressing windows, mortar use, roofing, etc. Guidance will be in keeping with the local vernacular. Recording of buildings is achieved through the planning process. Where alterations are to take place to buildings, they also need to be recorded by RCAHMW or expert contractors if the Park's built heritage is not to be lost. Each building has its own story to tell - information which can easily be lost through insensitive alterations. The Draft Heritage Protection Bill makes reference to the development of lists of assets of special local interest.

4. Conserve and enhance settlements and settlement patterns.

Settlement patterns need to be considered and reflected in new development so that greenfield development does not destroy village forms. Options are currently being investigated in the formulation of the Local

Development Plan. Within existing Conservation Areas, further improvements are required, perhaps related to village design statements, in partnership with local groups. Future designations are likely to be of small areas within settlements, so that scarce resources can be concentrated where they will have the best effect. Local communities and groups have a role in conserving and enhancing the quality of settlements, through village enhancement schemes and village design statements, and by actively engaging in the LDP process. Inherent in this approach is the requirement of a sustainable settlement strategy that satisfies the economic, environmental and social aspects of sustainability.

5. Promote built heritage education and awareness.

As with archaeology and historic landscapes, built heritage requires development and implementation of a programme of public awareness and community outreach to support sustainable management of this resource. The BBNPA and its partners can, for example, promote the use of traditional building materials and methods through education, outreach, training and financial assistance.

CROSS-REFERENCE

7.1.1	Landscape
7.1.4	Historic Environment
7.1.6	Culture and Traditions
7.1.11	Energy
7.2.2	Education
7.2.3	Interpretation
7.3.1	Sustainable Communities
7.3.4	Planning and Development

7.1.6. Culture and Traditions

There are close links between culture and the physical landscape. Landscape character is strongly influenced by the patterns and traditions of past and present agriculture and other land uses including commoning and grazing practices and by social and industrial history. Commoning and grazing are significant traditions on a UK and international scale. Graziers in and around the National Park produce some of the finest sheep and cattle in the country. Family farming practices and traditions, such as hefting, stone walling and hedge laying, are handed down generation to generation. The Park is also the centre for breeding of Semi-feral, Section A Welsh Mountain Ponies. Similarly, the Blaenavon Industrial Landscape World Heritage Site captures the story of life in the South Wales Valleys during the Industrial Revolution.

Local distinctiveness is also affected by the associations it carries, through place names or with literature, politics or more personal connections. Together these qualities create the Park's "bro" (sense of place) and "cynefin" (a person's habitat) which are expressed uniquely through the medium of Welsh.



Brecon Jazz Festival

Sustainability implies that the importance of the heritage of the past should be acknowledged and handed down, integrating this with the needs and well-being of present and future generations. A lively culture and living traditions contribute to a healthy community. The Park's distinctive blend of cultures and traditions are also attractive to visitors and, in turn, contribute to a healthy local economy. It is part of the BBNPA's vision that the Park's strong Welsh heritage and rich cultural life should thrive and grow.

Strategic Objectives: Culture and Traditions

I. Support the Park's cultural life and traditions through partnership working.

Although the BBNPA is charged with conserving cultural heritage, this part of its statutory purposes is likely to be fulfilled mainly by other organisations and individuals. The National Park's communities have living cultures that thrive without BBNPA support. The Park's stakeholders need to develop effective and innovative ways in which they work together to conserve and enhance culture and traditions in the Park. Existing examples of effective partnerships include ongoing support of community events and festivals.

The BBNPA assist local organisations to obtain funding for cultural projects, in its commitment to the Welsh language, by supporting sustainable community initiatives and by way of the Sustainable Development Fund. The BBNPA have also encouraged and supported training and conservation of local skills and traditions such as traditional livestock farming practices and dry stone walling. Most of projects and policies in the National Park relate to the conservation of culture and tradition in some way, as is evident throughout this Plan. The BBNPA should improve its promotion of cultural associations of its properties and organise traditional skills courses and competitions.

2. Record and monitor the Park’s cultural heritage.

The BBNPA aims to develop partnerships and identify the various aspects of culture and traditions in the Park that help to make each part of the Park distinctive and defines its sense of place. These efforts will create a baseline for future monitoring and suggest suitable indicators. This work will identify the potential for management actions related to culture and traditions, and ensure that what might be lost is recorded in the most appropriate way.

3. Promote the use of the Welsh language.

The BBNPA and its partners play a key role in promoting the Park’s and Wales’ cultural heritage by developing the use of Welsh in their own work and by supporting local events and activities. The BBNPA’s Welsh Language Scheme, for example, which is approved by the Welsh Language Board, will continue to be implemented, increasing the knowledge of Welsh among Park staff and its use in publications and other written material.

4. Promote cultural heritage as an attraction for people.

Much of the BBNPA’s work in support of the social and economic vitality of the Park involves making the most of the area’s culture and heritage, its sense of place. To this end, the BBNPA and its partners should take full economic advantage of the Park’s culture and traditions to promote cultural heritage as an attraction and to support the lives and livelihoods of the people who live and work here, creating a richer experience for all.

5. Develop understanding and awareness of cultural life and traditions.

Part of the challenge to promoting culture and traditions in the Park is developing an understanding of the value of the intangible aspects of cultural heritage, many of which can only be fully appreciated through the medium of Welsh. Social history and local culture are ever-changing

facets of this heritage. The BBNPA needs to emphasise the value of cultural heritage in everyday life. The aim is to enable local communities to identify, record and share local history and culture via “toolkits,” community events and activities.

CROSS-REFERENCE

- 7.1.1 Landscape
- 7.1.4 Historic Environment
- 7.1.5 Built Environment
- 7.2.1 Outdoor Access and Recreation
- 7.2.2 Education

7.1.7. Air Resources

“Fresh air” is one of the key qualities that bring people to the Brecon Beacons. High standards of air quality not only lead to increased life expectancy and quality of life, but they also contribute to improved habitat quality and enhance biodiversity.

Air quality in the Brecon Beacons is good, particularly compared to more heavily populated areas of South Wales. The outstanding air quality issue is acid rain, especially nitrate deposition, originating from outside the Park. This affects vegetation growth and water quality. EAW have also indicated that particulate matter and ozone may be of concern as well. Particulate matter and ozone have no exposure threshold levels below which adverse human health effects do not occur. Transport and delivery, power generation and other heavy industries are the major contributors to poor air quality in the Park.

The increasing focus on biofuels production also poses a threat to local air quality through increased concentrations of pollen from oilseed rape, a potential allergen.

Strategic Objectives: Air Resources

I. Maintain and, where possible, improve the Park's air quality.

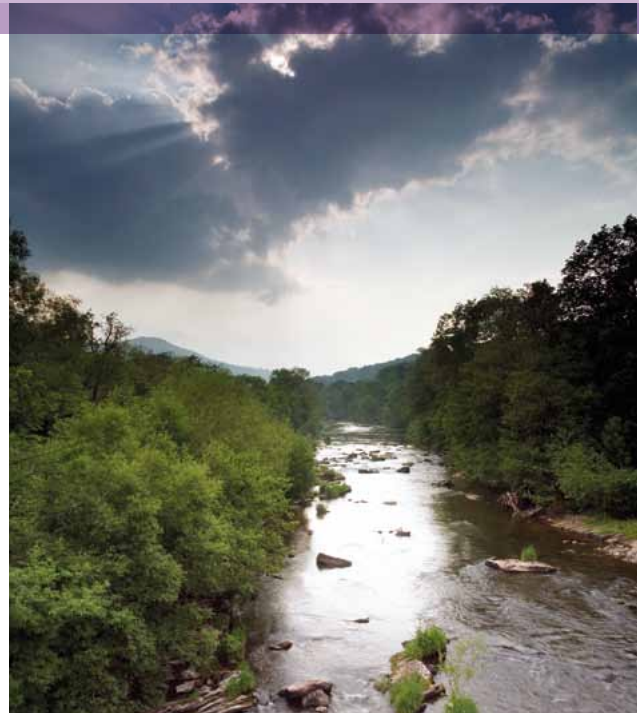
The UAs carry out Updating and Screening Assessments (USA's) to determine if there are "hot spot" locations where there is potential for air quality objectives to be exceeded. This work shows that air quality is up to standard in the Park. However, increases in development, product delivery and traffic within the Park, or industry and power generation outside the Park, could increase air pollution above current standards. Policies will aim to reduce the negative effects of key pollution sources on the Park's air quality. For example, the BBNPA and its partners can encourage cleaner alternatives to conventional modes of transport, power generation and heavy industry. Policies can also be designed to reduce the need for travel to and within the National Park through appropriate siting of new developments and provision of public transport infrastructure.

CROSS-REFERENCE

- 7.1.8 Water Resources
- 7.3.4 Planning and Development
- 7.3.5 Transport

7.1.8. Water Resources

Along with the Monmouthshire and Brecon Canal (**see Map 5**), more than 25 rivers and streams (**see Map 3**) originate in or pass through the Brecon Beacons National Park, providing the source for many significant river systems in south Wales. These include the Usk, Wye, Tawe, Twrch, Nedd, Hepste, Cynon, Taf, Rhymney and Ebbw. Additionally, more than 18 lakes and reservoirs (**see Map 4**), and countless wetlands and smaller water bodies are scattered throughout the Park. The Park's rivers and streams have been influential in shaping



Top: River Usk

Above: Pump house, Pontsticill Reservoir

the landscape, carving out gorges, valleys and floodplains which present contrast for the uplands. Water courses also continue to form and alter sinkholes, lakes, caves, waterfalls and subterranean features which provide habitat for a variety of unique species.

The Park's waters are home to the likes of otters, salmon, trout, aquatic insects and native crayfish, and previously water voles. They sustain countless other species, plant communities

and habitats, including agricultural ecosystems. Rivers and watercourses are also important as linear mechanisms for biological connectivity, linking habitat features across the length and breadth of the Park. Several of these water bodies have been recognized for their scientific and ecological value, including the Rivers Usk and Wye and Llangorse Lake (see **Map 7**). Many of the Park's designated wildlife areas such as National Nature Reserves (NNRs), Bat Conservation Sites and Sites of Special Scientific Interest (SSSIs) are wetland sites. They include wet woodlands, bogs and heath, fens, wet pasture, swamps and open water. Invasive species (such as Himalayan balsam, giant hogweed and Japanese knotweed) pose a threat to the integrity of the Park's diverse wildlife.

The Park's streams and rivers have served as principal travel and settlement routes for humans throughout history. Ancient human settlements relied heavily on wetlands for navigation as well as for food (fish, hunting), plant materials and grazing. Additionally, the Park's wetlands have preserved archaeological artefacts and evidence of historic settlements and human activities. Wetlands have also preserved evidence of previous landscape change, including how surrounding ecosystems and their biodiversity have changed. Unfortunately, wetlands have been progressively drained and in places effectively removed from the landscape to meet the growing demands for land use and development.

Along with numerous groundwater private water supplies, surface waters provide a vital resource to communities within and outside the Park whilst supporting its natural environment. Groundwater supplies are of particular significance to populations along the Park's southern boundary, where the resource is most in demand. Several groundwater source protection zones administered by EAW exist in these areas to ensure the maintenance of water quality. In some areas, groundwater springs are fed from fissures in the underlying geology. Any polluting operation could have serious implications, as this water is a significant source of potable water supplies to domestic and industrial



Llangorse Lake

recipients. Dŵr Cymru-Welsh Water (DCWW) is licensed to abstract these groundwater resources in terms of both quality and quantity. It is, therefore, imperative that no degradation of these sources occurs. Reservoirs in the BBNP supply drinking water to south Wales as well. The majority of licensed abstractions are for public water supply, but water also serves industry, agriculture and domestic use. These water bodies also attract a growing number of avid outdoor enthusiasts interested in angling, boating, canoeing, nature study, relaxation and other activities.

Despite plentiful rainfall in the region, predicted shifts in precipitation associated with climate change are likely to put more strain on water resources, particularly during summer months. Water abstraction rates for public water supplies and domestic use are likely to increase under these scenarios, and potential increases in visitor numbers will add to this demand. Any increase in water abstraction across the Park could have an effect on waterlogged archaeological deposits. Similarly, careful consideration will need to be given to abstraction from the River Usk to feed the Monmouthshire and Brecon Canal to achieve a sustainable balance. The canal

Case Study

Usk and Wye Catchment Initiatives

Under the European Water Framework Directive (WFD) the UK must protect, enhance and maintain all surface, coastal and groundwater bodies in order to achieve good chemical and ecological status by 2015. Of the river bodies that have been assessed in Wales, 25% by length are classified as Good status and almost 50% by length as Moderate. Wales currently has no river bodies classified as High status. Meeting the requirements of the WFD will require action on both point source and diffuse pollution.

The Environment Agency Wales Catchment Initiatives operate in 6 priority river catchments where diffuse pollution from land management is a key issue. Identification was based on levels of impact from diffuse pollution and nationally and internationally important designated sites including Sites of Special Scientific Interest (SSSI) and the Natura 2000 designations. The Initiatives are coordinated through a network of Catchment Coordinators who engage with stakeholders and provide and coordinate advice to land managers allowing them to improve environmental performance across the catchment. It encompasses best farming practice, habitat creation, flood risk management and fisheries interest. Two of the Catchment Initiatives are located in the Brecon Beacons National Park.

The focus of the Rivers Usk and Wye Catchment Initiatives are to prioritise areas where there are specific problems with water quality and to identify areas at risk from diffuse pollution.

Diffuse water pollution is defined as pollution arising from land-use activities (rural and urban) that are dispersed across

a catchment and do not give rise to a process effluent, municipal sewage effluent or farm effluent discharge. The extent and significance of diffuse pollution are determined by the way, in which land is used and managed, together with a range of environmental factors such as climate (especially rainfall), geography and geology, which influence the characteristics of run-off and the sensitivity of the receiving waters.

Agriculture is a major cause of diffuse water pollution as Wales is predominantly rural, with the majority of land area used for agriculture (79%) and forestry (13%). By reducing agricultural sources of diffuse pollution within river catchments, resource managers can ensure that emissions to water are consistent with the ecological requirement so that the objectives of the Water Framework Directive can be met.

There is a need to raise awareness of the issues and a requirement to effectively influence the wider environmental consciousness of land managers to bring about change in practices that are likely to improve water quality. Integrating diffuse pollution mitigation with habitat creation, flood risk management and fisheries issues could achieve multiple outcomes - a single solution can often satisfy more than one objective and all approaches benefit from collective catchment-based action.

Catchment Coordinators working under the Welsh Catchment Initiative have a proactive non-enforcement approach to tackling agricultural diffuse pollution by engaging the farming community. This engagement will be delivered by means of 1:1 farm visits, farm workshops and demonstrations of good practice.

River Usk, Brecon

and the river are both important assets to the National Park. While the chemical quality of water is generally very good throughout the Park, the proliferation of small private sewage treatment works and poorly maintained existing cess pits and septic tanks can be a major influence on the water quality of the Park. Inappropriate agricultural conservation practices and the disposal of sheep dip throughout the Park are the primary concerns for water quality. A commercial product is now available, however, that has been shown to reduce the toxicity of spent sheep dip (diazinon) by as much as 99% in three hours.¹⁸ Its use requires further study, but it provides a potential solution to a practical water quality issue.

The condition of the Park’s rivers and wetlands has been compromised further by acid deposition over the last 100 years since the Industrial Revolution,¹⁹ and by nitrification which enriches surface soils, having a fertilisation effect. Other activities that have the potential to contribute significantly to the degradation of the Park’s water quality include large-scale construction and development projects that are poorly monitored. Improved monitoring will reduce their potential negative effects.

The loss of wetlands has increased the flood risk to settlements and agriculture both within and downstream from the Park, eliminating natural flood storage areas, reducing the rate of water infiltration into the soil and thereby increasing the volumes of rapid surface run off that give rise to floods. It has also reduced or reversed natural means of maintaining and improving water quality. Engineered solutions are costly and labour intensive to carry out, and they deflect the problems downstream.

A more sustainable and cost-effective solution is to implement catchment-scale surface water management by restoring

functioning peatlands and wetlands in the uplands and the lowland floodplains. Both the quality and quantity of water resources are dependent on the sustainable management of upland soils and vegetation. Managing surface waters at source can alleviate flooding, improve water quality and quantity, improve soil condition and promote biodiversity. One method of achieving these outcomes is through re-introduction of the European beaver. There is a growing interest in the re-introduction of European beaver to Britain. Once introduced, the costs of maintaining and managing European beaver populations is much less than the ongoing maintenance costs of engineered solutions. Published evidence also identifies the benefits beaver can bring to wetland habitats, biodiversity, fisheries, water quality and the local economy. Species such as otter have been proven to benefit from the presence of European beaver, for example. Any form of wetland creation or restoration will have to be done sensitively, in order to have a positive effect on the Park’s special qualities.

Protection and sustainable use of the Park’s water resources will require implementation of the EC Water Framework

18. Porter, L. and Clarke, C. 2007. Dipping -- The Turning Point. Sheep Farmer, July-August. Pgs. 24-25.

19. Batterbee, R.W., C.J. Curtis, and H.A. Binney. 2004. The Future of Britain’s Upland Waters. Proceedings of Meeting, 21 April 2004, Environmental Change Research Centre, University College, London.



Cantref Reservoir

Directive (WFD) under the Water Framework Regulations in Wales. The WFD requires the integration of water resource management issues with other social, economic and environmental concerns across entire watersheds or catchments. The principles of the WFD are:

- Preventing deterioration in and improving water status;
- Developing water and waste water capacities;
- Mitigating the effects of floods and droughts; and
- Ensuring sustainable water use.

Issues, outcomes and objectives will be linked via River Basin Management Plans for each major hydrological unit. The Brecon Beacons National Park falls within the Severn River Basin District and the West Wales River Basin District. Environment Agency Wales are in the process of formulating these plans. Utilising the WFD integrated approach and principles could:

- Help to restore the condition and function of existing wetlands;
- Identify where there are good economic and environmental reasons for reinstating former wetlands;
- Provide mutually beneficial outcomes from water management, such as water conservation for year-round evenness of supply, water quality improvements, reduced flood volumes and agricultural improvements; and
- Where it is economically competitive and does not exacerbate flood risk, achieve mutually beneficial outcomes from woodland expansion within floodplains and on valley sides.

Catchment sensitive farming, for example, employs this approach to ensure the continued supply of drinking water for local and nearby communities in a sustainable

manner whilst delivering other public benefits. Planning policies will incorporate this approach as well by way of the Local Development Plan, maximising sustainable drainage systems (SUDS) for all new development, locating new developments outside areas of flood risk and ensuring sustainable water use and waste water treatment, for example. Open storage SUDS should be promoted over underground storage, as open systems have other benefits such as increasing and enhancing habitats. Additionally, new wetlands can be integrated into the “green infrastructure” of new developments. The National Park Management Plan reflects this shift towards a holistic approach to managing Park waters and associated resources and will continue to do so in the future. To be successful in these endeavours the BBNPA and its partners will need to address considerably more attention and resource to managing water quality and quantity across the National Park.

Strategic Objectives: Water Resources

I. Maintain or improve the quality of the Park's groundwater, rivers and lakes.

The biological and chemical quality of water in the Park is generally very good. The quality of some of the Park's waters and ecosystems are threatened by lack of sewerage capacity, industrial point sources and diffuse pollution, from both urban and agricultural sources. Lack of sewerage capacity, for example, leads to a proliferation of non-mains drainage such as septic tanks, private treatment plants and cesspits. These systems add appreciably to the number of potential sources of pollution that need to be monitored to ensure that, if they fail, they will not contribute to the pollution of soil and water. Application of sheep dip poses a problem for water quality in most catchments within the Park, though solutions are becoming available as noted in the text. Management strategies will need to reduce and eliminate

pollution episodes where possible and encourage farmers to use catchment-sensitive agricultural practices. EAW recommends monitoring point source pollution and diffuse pollution source(s) for specified catchments within the National Park to ensure that guidelines are met. Compatibility with the Water Framework Directive will complement these efforts.

2. Ensure that water resources are used sustainably across all sectors in the National Park.

Although quantities of water are sufficient to meet current demand, climate change will alter the distribution and abundance of water through time and space. This will result in excess at certain times of the year and severe limitations at other times. Immigration to the area also could strain existing water resources, sewerage capacity, and related infrastructure, particularly if it continues uncontrolled. Water will need to be used more efficiently to meet the needs of society without causing damage to the environment. Efforts should be made to restore and maintain water abstraction, run-off and recharge rates within the Park's carrying capacity (including future capacity). Both the BBNPA's "Sustainable Design Guide" and "Best Practice in Biodiversity and Geological Conservation in Planning and Development" provide guidance on incorporating wetland and water management features into the built environment. Sustainable development initiatives also aim to reduce flood risk through the siting of development outside the flood plain and encourage sustainable drainage systems (SUDS) through building design and urban design. All partners involved need to work towards sustainable water resource use within the context of their respective remits.

3. Encourage a coordinated approach to national and regional policy so that they are consistent and complimentary.

The Environment Strategy for Wales, Climate Change Adaptation Action Plan, Spatial Development Plan, RDP Wales, Energy Route Map and agri-environment schemes have been formulated without consistency among strategic objectives and clear linkages between each document. Management of rivers and wetlands is affected by and can contribute positively to all of these strategic interests. There is an opportunity to deliver the aims of these strategies efficiently through the River Basin Management Plans in accordance with the Water Framework Directive, optimising the achievements of all plans.

4. Achieve sustainable conservation management of all existing wetlands, rivers and streams within the National Park.

Managing natural resources is quickly increasing in importance in response to climate change. Addressing these risks will bring other benefits, including reduced flooding, minimised soil erosion and stabilised carbon sinks among many others. Given the importance of rivers and wetlands to the National Park's landscape, as well as the high number of statutory designations on them, this must be stated explicitly and can be achieved in conjunction with fulfilling the other strategic objectives.

5. Optimise the Park's capacity for water storage, sustainable, small-scale hydroelectric power and irrigation of locally grown food.

The National Park's capacity to store water and produce other public benefits can be optimised through restoration of the land's natural capacity to retain rainfall and surface flows, without the need for new reservoirs. The initial premise is that all initiatives should ensure that they conserve and enhance the Park's natural beauty, wildlife and cultural heritage, and that they view the Park's landscape in terms of its energy potential. The Park receives plentiful rain and has large, flat areas of deep,



Pontsticill Reservoir

water holding soil to act as a water reservoir. Many of the local streams, although not large, possess qualities that make them ideal for generating electricity through sustainable, small-scale hydroelectric generators. This includes the presence of scattered or small, compact settlements at the base of the streams to provide numerous, small consumption points. These settlements can also generate income from the power generated, to be re-invested in other community and environmental benefits. Projects underway in the Park such as the Green Valleys Initiative can make significant contributions to solving the energy and environmental needs of the Park's communities (see Section 7.1.11 Energy). As with other initiatives, sustainable hydropower schemes must build environmental protection into the siting and design, whatever the scale of the scheme. Where schemes would not be compliant with environmental or other legislation by, for example, preventing the passage of migratory fish or increasing flood risk, their development will not be supported. The EAW are working proactively with the BBNPA and the Green Valleys to encourage sustainable hydropower schemes, and have published Good Practice Guidance that describes how environmental concerns can be accounted for in hydropower schemes.

6. Implement objectives within the River Basin Management Plans under the Water Framework Directive to achieve good ecological status for resilient aquatic ecosystems within the Park.

Using the approach highlighted in **Strategic Objective 3** above, the WFD can provide a cohesive framework to improve and maintain the ecological status of the Park's aquatic ecosystems. Farmers and other land managers and owners will need advice and support to live up to the objectives in these plans. Agricultural policy and financial incentives will also need to be targeted to achieve the objectives set forth in the WFD.

7. Halt the continued acidification of upland soils and waters within the Park.

Acidification of upland soils and waters will increase as the atmosphere warms up, which is largely outside the control of the stakeholders within the National Park. Therefore a national effort involving national policy and industrial practice on land and sea is required to fulfil this aim.

CROSS-REFERENCE

- 7.1.2 Biodiversity
- 7.1.4 Historic Environment
- 7.1.5 Built Environment
- 7.1.8 Water Resources
- 7.1.9 Soil Resources
- 7.1.12 Farming
- 7.1.13 Woodlands
- 7.1.14 Uplands
- 7.2.1 Outdoor Access and Recreation
- 7.3.1 Sustainable Communities
- 7.3.4 Planning and Development

7.1.9. Soil Resources

Together with air and water, soil serves as one of the Earth's fundamental life support systems. Soils and their biota maintain critical functions on a global scale, such as hydrological, carbon, phosphorus and nitrogen cycling. For example, soils act as a carbon sink and are thus an important factor in controlling climate change. Soils are essential to agriculture, forestry, energy production and the textile and fibre industries, providing nutrients and making water available for plants and animals alike. Soil type, structure and function - in conjunction with climatic factors - determine the location and quality of wildlife and their habitats. In fact, soils provide habitat for millions of organisms that dwell beneath their surface. Soils also serve as a medium in which many cultural artefacts have been preserved. They hold the record of humanity's past and, quite literally, serve as the foundation for the built environment.

Because of these relationships, degradation or contamination of soils can have cascading and sometimes irreparable effects on biodiversity, economics, culture and even global processes.



Llanthony Valley

It can take hundreds to thousands of years to form one centimetre of soil depth, making soils a non-renewable resource on a human time scale. Yet very little is known about soils despite humanity's utter dependence upon them.

A firm understanding of soils is critical to management, especially in a park dominated by uplands and containing significant organic soil resources. Unfortunately, there is a lack of data for soils in the BBNP, though it is known that there are no nitrate vulnerable zones and no contaminated sites in the Park. Soil erosion and impoverishment, particularly the loss of organic soils, are the most significant concern for healthy soils. Peat soils which play a significant role in carbon storage have eroded, succumbing to a combination of historic industrial pollution, recreation pressures, inappropriate grazing and the elements. To a lesser degree, some agricultural practices are having detrimental effects on the Park's cultural and historic record. This Plan provides for the conservation and enhancement of soils within and around the National Park.

Strategic Objectives: Soils Resources

I. Protect the Park's soils from degradation and erosion

Soil erosion is of serious concern in the Park. Loss of soil quality, quantity or function will impair the soil's ability to support plants and animals, store carbon and provide other important ecosystem services. Vegetation cover and peat are easily removed from thin mountain soils and popular paths. Erosion can be exacerbated by weather; recreational activities, grazing pressures and some farm and forestry practices. Soils can also be damaged by the removal of turf, which includes the top layer of the soil, a subject of concern for local development as well as the recent gas pipeline project through the Park. Peat is being damaged by acidification and unmanaged burning; much of the Park's blanket peat is degraded. Peat soils aid in the preservation of cultural artefacts and other features of the historic environment, which risk exposure

and damage through increased erosion. Soil and peat damage can be reduced by minimising the sources of degradation and erosion where possible and by improved vegetation cover. Careful management of particularly vulnerable areas and long-term monitoring of restored sites are important steps toward successful protection of the Park's soil resources. Much of this can be achieved through implementation of the BBNP Upland Erosion Strategy.

2. Improve collaboration and cooperation among stakeholders managing soil and peat resources.

The BBNPA will work with commoners and other key stakeholders in the National Park to coordinate managed burns, improve grazing practices, restore degraded areas and adopt other management approaches that conserve and enhance soil and peat resources. Because soil and peat resources extend beyond Park boundaries, management initiatives will benefit greatly from cooperation with partners outside the Park, including partners in England. Efforts will include collation of data and other information pertaining to Park soils. A key component of this effort will be the provision of educational programmes and materials explaining the importance and details of best management practices.

CROSS-REFERENCE

- 7.1.4 Historic Environment
- 7.1.14 Uplands
- 7.3.4 Planning and Development
- 7.1.10. Minerals

7.1.10. Minerals

For many years, minerals have supplied fuel in the form of coal and construction materials for walls, buildings, roads and other forms of development in and around the Park. Minerals are also the parent material for soils, providing nutrients and habitats utilised by a variety of plants and other wildlife. Through the ages, agriculturalists have taken advantage of the Park's mineral resources directly for crop production, in the form of burnt lime used to neutralise soil pH, and indirectly for the purposes of animal husbandry. Mineral extraction has been and, in isolated cases, continues to be a viable economic activity in the National Park. Consequently, the Park's minerals and soils are critically linked to its biodiversity and economics as well as its history and cultural heritage.

Mineral working inevitably interferes with the ability to conserve and enhance the Park's natural and cultural resources and to provide for the enjoyment of these by the public. Mineral extraction consumes limited resources. It not only damages the Park's biodiversity and geodiversity but also mars the Park's natural beauty. Quarrying can impact on archaeological sites. In some instances, however, it may reveal features of interest which might be threatened by quarry infilling or create new and unique forms of wildlife habitat. Additionally, abandoned quarries and restored sites often succumb to unauthorised use by mechanised recreational activities which may cause damage to the environment, result in personal injury and infringe on the quiet enjoyment had by others.

Yet the surviving evidence of the historic extraction of minerals within the Park is now a significant element of the Park's historic environment. The character of its built heritage is dependent upon the character of the building stone, mostly obtained from small-scale local quarries. Ideally, small quantities of locally sourced building stone, from appropriately located quarries, would be used to enable conservation work and where appropriate new build to take place whilst ensuring that the character of the historic buildings, and the



Penderyn Quarry

influence that they have on the broader historic landscape character is retained. However, a study conducted by the National Museum Wales in 2009²⁰ concluded that there are insufficient supplies of local building stone to provide for local need. Consequently, local building stone requirements will need to be met by way of sources in close proximity to but outside the Park, or from alternative sources such as recycled, secondary and waste materials where appropriate to the National Park designation.

The Welsh Assembly Government aims to “prevent unacceptable aggregate extraction from areas of acknowledged landscape, cultural, nature and geological conservation and hydrological importance.”²¹ This encompasses national parks, SSSIs, SACs and historic sites, all of which are considered in the context of this Plan. In relation to National Parks and Areas of Outstanding Natural Beauty, WAG’s aim is that “minerals development should not take place in these areas save in exceptional circumstances. All mineral applications must therefore be subject to the most rigorous examination and all major mineral developments demonstrated to be in the public interest before being allowed to proceed.”²² The Quarry Products Association also has made a commitment to reduce the impacts of its operations in national parks, and this commitment is welcomed.

20. National Museum Wales. 2009. Building Stone Use in the Brecon Beacons National Park.
 21. Welsh Assembly Government. 2004. Minerals Technical Advice Note (Wales) 1:Aggregates.
 22. Welsh Assembly Government. 2001. Minerals Planning Policy Wales, para. 21.

Strategic Objectives: Minerals

I. Reduce the damage done to the Park by mineral working whilst fulfilling the BBNPA’s obligation as a Mineral Planning Authority.

Minerals can only be worked where they are found, and the principles of sustainability require that the needs for minerals are met from as close to the demand as possible, to reduce the Park’s carbon footprint via minimising transport of minerals. This would suggest that minerals required for development taking place in the BBNP should be quarried within it. However, WAG policy supports the BBNPA’s view that national parks should not be required to contribute proportionally to the regional landbank of aggregates.²³

The Regional Technical Statement endorses this view, and further recommends exploring the possibility of a gradual transfer of production from the BBNP to other areas.²⁴ WAG has also supported the policies in the BBNP Unitary Development Plan (UDP) which state that the BBNPA will not identify in this UDP any safeguarded or preferred areas or areas of search for further aggregate mineral extraction within the National Park.²⁵ Similarly, “applications for new or extended mineral workings... will be subject to the most rigorous examination and will only be permitted in exceptional circumstances where it is demonstrated to be in the public interest...”²⁶

The BBNPA will continue to take part in the development of regional guidance through its membership of the South Wales Regional Aggregates Working Party.

23. Welsh Assembly Government. 2004. Minerals Technical Advice Note (Wales) 1:Aggregates para. 49.
 24. South Wales Regional Aggregates Working Party. November 2007. Consultation Draft Regional Technical Statement.
 25. Brecon Beacons National Park. 2007. Unitary Development Plan: Part 1 Policy 6: Allocation for the Extraction of Aggregate Minerals.
 26. Brecon Beacons National Park. 2007. Unitary Development Plan: Part 1 Policy 7: Minerals Development.

2. Apply WAG's policies against mineral working in national parks to the BBNP's identified sand and gravel deposits.

Minerals Technical Advice Note 1 identifies deposits of glacial sand and gravel in the Park, and requires them to be safeguarded from other development, for possible future use. Currently these resources are of unknown quality and quantity and are too small-scale and distant from major markets to make their extraction economically viable. WAG considers that there may come a time when there is a demand for them, for reasons of sustainability or because finite resources have been depleted elsewhere. The BBNPA has refused to safeguard them in the UDP, and this policy has been supported by the Inspector's report. This stand has resulted in WAG's refusal to allow the UDP to be formally adopted. Consequently, the UDP has merely been approved by the BBNPA for development control use. Current BBNPA policy, backed by WAG guidance, does not support new mineral extraction in the Park. The BBNPA will continue to resist extraction of sand and gravel from the identified sites.

3. Explore more local and sustainable options to supplement or replace the need for mineral resources.

The Welsh national parks serve as exemplars of sustainability, experimenting with innovative development concepts whilst promoting environmental conservation through leadership. With respect to mineral extraction, there is a need for local sources of building stone for the repair of old buildings and walls and for limited use in new-builds. There are not enough sources of local building stone, and finding new ones will require exploration. For other uses, the BBNPA must identify alternatives that meet the demands for building materials whilst satisfying WAG's vision for the national parks. This can be accomplished through the use of secondary, recycled or waste materials, by using alternative building materials (e.g., wood, straw, mud), by finding alternative

and sustainable sources of mineral aggregates, and/or through reduction in the demand for mineral resources, for example. Any alternatives, of course, will need to adhere to the Park's purposes, duty and planning policies whilst conserving the Park's special qualities.

CROSS-REFERENCE

- 7.1.3 Geodiversity
- 7.1.4 Historic Environment
- 7.1.5 Built Environment
- 7.3.1 Sustainable Communities
- 7.3.4 Planning and Development
- 7.1.11. Energy

7.1.11. Energy

More than 90% of Wales' energy supplies come from non-renewable resources, comprising oil, coal and gas.²⁷ Energy distribution is very inefficient. For example, 90% of the energy generated by large power plants is dissipated by the time it reaches consumption points in the Park. Continued reliance on fossil fuels presents at least two undesirable environmental consequences for Wales and the Park. First, the burning of fossil fuels emits substantial concentrations of greenhouse gases which are, in turn, altering climatic conditions across the globe. Transportation (35%) and domestic usage (26%) contribute significantly to unsustainable fossil fuel consumption and greenhouse gas emissions in Wales, whereas industries consume about 10% of the UK's energy supply.²⁸ Secondly, there is growing consensus that global oil production has or soon will peak whilst oil consumption continues to grow. Because society's infrastructure is based on the consumption of fossil fuels, particularly petroleum, the impending peak in oil production relative to consumption (referred to as peak oil) has serious implications for every

27. Department of Trade and Industry. 2007. Energy White Paper: Meeting the Energy Challenge.

28. Ibid.



Wood powered heating system



Old water mill at Gilwern

facet of daily life. Similar scenarios are envisaged for gas and coal resources, albeit further into the future.

Whilst these factors may seem insurmountable, local efforts to improve energy efficiency and promote the use of renewable energy can effectively reduce the Park's ecological footprint. Large-scale electricity generation and distribution, for example, is highly inefficient, but local generation of electricity is considerably more sustainable. Similarly, the Park's woodlands and hedgerows provide residents and local communities with a potential fuel source for wood burners and small-scale biomass boilers, assuming these resources are used sustainably. Other resources within the Park may also be harnessed to generate sustainable, renewable heat and energy. The challenge is to utilise local resources to satisfy local need in the most sustainable fashion whilst limiting adverse effects. Even small-scale, renewable energy projects may cause undesirable impacts, particularly when sited in environmentally or culturally sensitive locations. The degree of sustainability of locally produced energy will vary with methods of production and from site to site. As with any form of development, small-scale, renewable energy projects in the National Park must be compatible with its purposes and duty and special qualities. Individual projects may also be subject to further environmental and sustainability criteria by way of the Sustainability Appraisal (SA) and/or Habitats Regulations Assessment (HRA).

Implementation of sustainable, small-scale and local generation projects, then, can make great strides toward reducing the Park's ecological footprint. The end result is an increase in regional self-sufficiency, overcoming local reliance on external energy providers and improving community responsibility through shared resource management. The BBNPA and its partners will encourage a reduction in greenhouse gas emissions by reducing energy use, improving energy conservation and supporting renewable energy production. This will be reflected in the LDP which will strive to optimise sustainable, renewable energy output and energy efficiency from all new buildings and developments.

Strategic Objectives: Energy

1. Help achieve national targets for greater renewable production through community and domestic scale schemes.

In 2007, the Welsh Assembly Government set renewable energy targets for Wales of four terrawatt hours per annum by 2010 and seven terrawatt hours per annum by 2020.²⁹ More recently the focus has been shifted to reduce carbon-based energy production by 80-90%

29. Welsh Assembly Government. 2007. Policy Statement for the National Parks and National Park Authorities in Wales.

Case Study

The Green Valleys Initiative

The community-led Green Valleys project is working to develop the UK's first carbon negative valley in the Brecon Beacons National Park which may have the capacity to provide five times more energy than the area needs from micro-hydroelectric schemes alone.

Dyffryn Crawnon Valley in the National Park is well on its way to being the UK's first carbon negative community. The valley's first 3.7kW hydroelectric project was installed in 2008 and a 17kW community-owned hydroelectric generator is to be built in summer 2010. It will generate 190% of the Valley's energy needs and reduce the entire community's carbon emissions by 42%. With five other streams already surveyed to supply a further 33kW it will eventually lead to a 94% reduction in carbon emissions making it a forerunner to become the UK's first carbon neutral valley.

With nearly 100 hydro schemes already identified in the Park, old mills, forgotten water wheels, streams and rivers are being looked at with fresh eyes by local farmers, landowners and residents who are incredibly enthusiastic about the enormous potential of hydroelectric schemes in Wales. In Britain last year there were 13 hydro schemes installed and 6 of those schemes were within the National Park which is the Green Valleys area. These initiatives are also creating local employment by training community members within the Green Valleys area to become hydroelectricity installers.

Hydroelectricity schemes in the BBNP are now generating 1.5% of the Green Valleys area's energy needs and the Green Valleys have already identified the next 15%. They are also in the process of completing feasibility studies and developing project plans for 92 hydro installations. If everything goes according to plan, in ten years time the area could be producing £30 million worth of energy.

The Green Valleys community project in the Brecon Beacons aims to reduce carbon emissions through a number of initiatives - not just hydroelectricity - and is the recipient



Compensation flow at Talybont



Inside a turbine house

of a £300,000 prize (January 2010) which recognises these efforts.

Set up by community volunteers, the Green Valleys beat off stiff competition from 350 entrants in October 2008 to become Wales' only finalist in NESTA's Big Green Challenge climate change competition, submitting grand plans to combat rising fuel costs and tackle climate change. Just some of their plans include restoring a network of micro hydroelectricity schemes in local streams and rivers, assisting local people reduce their fuel bills through community-led energy saving initiatives and to develop large scale peat bog restoration work.

In the Brecon Beacons National Park 11 communities have already signed up for the Green Valleys with another 7 communities in the process of joining. They are all volunteers and community members that are working on various projects which aim to reduce CO₂ emissions and also make their communities more sustainable.

whilst “producing as much electricity from renewable sources by 2025 as we consume.”³⁰ Although large-scale renewable energy projects such as wind farms are not appropriate in the National Park due to undesirable impacts on landscape, natural and cultural resources, WAG have charged the Parks with being exemplars of sustainability and centres of clean energy innovation. When sited appropriately, microgeneration of renewable energy is within the context of this vision.

The Park’s first community renewable energy scheme was approved in 2004. By the end of 2007, three hydropower, six photo-voltaic, 40 solar and five single turbine wind renewable energy schemes were in place in the National Park. More recently, interest and implementation of microgeneration schemes has increased dramatically through community-led initiatives associated with the Green Valleys Project. The BBNPA and its partners, in particular the Green Valleys Project and the Renewable Energy Assistance Programme (REAP), will continue to encourage private or community renewable energy installations that are compatible with the Park’s purposes, duty and special qualities.

Similar projects will be encouraged on the BBNPA’s own estate. In future, new dwellings or residential plans will also be required to have on-site renewable energy schemes integrated into their permissions in accordance with the Guidance of Sustainable Design in the National Parks of Wales (Spring 2009). Given the protected status of many of the Park’s aquatic resources - most notably the River Usk SAC - small-scale schemes will also need to consider mitigation for any adverse effects on biodiversity (including fish), hydrology and the availability of water in addition to those associated with the Park’s designation.

30. Welsh Assembly Government. November 2008. One Wales: One Planet. Consultation on a new Sustainable Development Scheme for Wales.

2. Reduce greenhouse gas emissions by minimising energy use.

The average ecological footprint for a person living in Wales is nearly three times that of the “average Earth share” of 1.8 area units.³¹ In accordance with the Kyoto Protocol, the UK Government agreed to a 12.5% reduction and set a domestic goal of reducing carbon dioxide emissions by 20% of 1990 levels by 2010.³² In Wales the target has been set for a 3% per annum reduction in carbon equivalent emissions.³³ Despite reductions in greenhouse gas emissions since 1990, UK targets for reducing them are not being met. More recent strategies urge the UK to “Power Down.”³⁴ These strategies encourage commonsense approaches to reducing wasteful energy consumption practices, implementing modern energy management technologies and adopting thrifty lifestyles. Powering Down does not mean going without, but it does require being more efficient and limiting carbon-intensive activities. The BBNPA and its partners will actively promote awareness of the issues and practices that help people “Power Down.” The BBNPA will aim to be an exemplar of best practice through its working practices and management of BBNPA estate. The Guidance of Sustainable Design in the National Parks of Wales (Spring 2009) includes policies and standards for new developments that will assist the BBNPA and its partners in meeting this aim. Examples of current initiatives in the Park can be found throughout this Plan.

31. Welsh Assembly Government. 2007. Sustainable Development Indicators for Wales 2007.

32. Welsh Assembly Government. 2005. Ministerial Interim Planning Policy Statement: Planning for Renewable Energy.

33. Welsh Assembly Government. November 2008. One Wales: One Planet. Consultation on a new Sustainable Development Scheme for Wales.

34. Centre for Alternative Technology. 2007. Zero Carbon Britain: An Alternative Energy Strategy.

3. Assist the development of community energy initiatives.

By 2028, the aspiration is that most of the Park's towns and villages will have community renewable energy systems, greatly increasing efficiency and producing a more cost effective energy solution than at present. District heating schemes and combined heat and power systems that use biofuels will be realistic proposal for many of the Park's settlements. Similarly, community wind turbines and hydro facilities will be more practical as technology advances and public perceptions change. The BBNPA and its partners will assist the Park's towns and villages in making this transition. BBNPA will produce guidance notes on renewable energies for the Park in 2010 so that applicants can provide the planning authority and its statutory reviewers with adequate information to determine if the proposed development is in conflict with the first purpose of the National Park or likely to degrade its special qualities.

4. Develop the capacity for a localised energy grid.

Areas of the National Park already have the potential to produce all of their heat and electricity requirements on site and not be a part of the national grid. As the effects of population pressures, climate change and fossil fuel depletion unfold, requirements for existing and new settlements to become energy self-sufficient are likely. Rather than viewing these scenarios as impediments to progress, they can be seen as opportunities to add environmental, social and economic value to the local community or social enterprise, reducing environmental impacts, promoting a sense of place and retaining all generated revenues.

5. Integrate renewable energy into building and settlement design.

The aim of both WAG and the UK government is for all new buildings to be carbon neutral by 2011 and 2015, respectively. To do this will require significant shifts in

architectural practice and the planning process. Indeed, the character of buildings will need to be radically altered to increase efficiency. Renewable energy will need to be integrated in initial design stages rather than add-ons or last minute amendments. In a move away from traditional planning protocol, for example, it may be most efficient for the situation of new settlements and buildings to actually "chase the energy," whereby developments are sited next to a useable water source that generates all heat and energy requirements, rather than opting for edge-of-town development that relies on traditional and inefficient solutions to energy delivery and consumption. Further consideration will be given to this potential criterion as is appropriate to the LDP planning process. The Guidance of Sustainable Design in the National Parks of Wales (Spring 2009) will assist in delivering this strategic objective.

CROSS-REFERENCE

- 7.3.1 Sustainable Communities
- 7.3.4 Planning and Development
- 7.3.5 Transport

7.1.12. Farming

Farming is a major industry in the UK. It contributes significantly to the economy, is a major rural employer (7% of the workforce in the National Park) and provides the country with food and other agricultural products. Farming practices also have shaped and continue to shape the natural environment. In the context of the Brecon Beacons National Park, farming and grazing help to maintain many of the special qualities of the Park, including contributions to landscape, biodiversity, the historic environment, culture and the socio-economic well-being of the local communities. Agriculture also has the potential to provide other public benefits, for example carbon capture and retention and catchment management to reduce flood risk. Agricultural holdings comprise 51% of the Park's land area; commons make up a further 38% of the Park, a proportion greater than many other national parks in the UK. Common land fulfils an important role within local farming systems and the continued use of traditional management practices has also allowed commons to retain significant conservation value whilst providing recreational opportunities via open access



Shepherding near Sennybridge

provisions described in the Countryside and Rights of Way Act (CROW). However, the economic viability of upland farming and grazing commons in particular is under threat because of recent changes within the agricultural sector.

Farms within the Park are typically family run, utilising enclosed grasslands with commons providing supplementary summer grazing. Upland farming would traditionally have been based on keeping hardy beef cattle and sheep, supplemented by sales of Welsh Mountain ponies. The sale of stores and breeding stock demonstrates the interdependence with lowland farms. Climate, poor soils and topography limit the agricultural potential of the land. Therefore for over 30 years, Government policy has recognised the need to provide additional financial support to hill farmers received through the Common Agricultural Policy (CAP). For many years, agricultural subsidies were targeted at increasing productivity, by providing minimum guaranteed prices for farm products, for example. These policies contributed towards a loss of environmental quality, for example through the agricultural improvement of semi-natural grasslands, over-grazing with sheep and the reduction in the number of cattle. In addition, reduced profitability resulted in less people available to shepherd the sheep so that they stayed in a preferred area of the hill without moving. Consequently, most hills had areas of grazing levels which varied from adequate to either over- or under-grazed. Some policy reforms occurred in the early 1990s with greater use of quotas with payments linked to numbers of livestock or area of crop produced and a small increase in the amount of agri-environment grants available to achieve conservation objectives.

In 2005 all subsidies linked to production finished. Farmers are currently paid a "Single Farm Payment" that in Wales is usually based upon the quantity of historic subsidies claimed by an individual farmer, subject to the land being maintained in good agricultural and environmental condition. The farming industry will be increasingly steered by other issues of changing markets and fluctuating commodity prices, the

Case Study

manner in which the Axis 2, Rural Development Plan funds will support traditional farming practices, and the incentives and markets which will be promoted for sourcing local food. Farmers are also being asked to address increasing global population pressures by way of food security issues. Government policies are calling for the country to become more self-sufficient in its food provision whilst accounting for increasing demand from nations experiencing food poverty. The farming sector will require practical solutions from Government and other sectors of society to address these challenges whilst increasing its food production and providing additional public benefits.

Whilst there have been historic pressures on the profitability of upland farming, the current trends are particularly significant because of an increase in both pace and scale. Current issues include:

- Lower prices received for agricultural produce partially due to supermarket bargaining power and cheap food imports;
- Reduction in levels of agricultural support due to reforms of the CAP;
- High cost of rural housing with limited opportunities for new entrants;
- The cost of implementing increasing levels of regulation, for example livestock records and tagging;
- Impact of animal disease such as foot and mouth; and
- Centralisation and loss of local agricultural processing industries, for example markets and slaughterhouses.

The changes in upland farming are so significant that there are likely to be fundamental changes in upland character and how the landscape is managed within a relatively short period of time. Upland farming requires specialist skills and knowledge, the fundamentals usually being passed down through family generations and matched to local conditions. An example of this is the knowledge and skills of how sheep

Brecknock Hill Cheviot Marketing

The Brecknock Hill Cheviot Marketing Project was awarded Sustainable Development Fund funding in September 2001. The aim of the project was to develop a major marketing campaign for lamb, to develop branding and to secure a market for lamb for future years.

The project has been hugely successful with 45 businesses joining a scheme to supply Marks & Spencer (M&S) with Brecknock lamb; in excess of 10,000 lambs were sold in 2008. Brecknock Lamb appeared in the M&S Christmas brochure.

The sustainability gains of the project are:

- **Economic:** Lamb sales to M&S have provided a much needed boost to the farming economy in the Central Beacons (especially post foot and mouth) and this helps to support the wider social economy.
- **Social:** A successful marketing campaign has encouraged community cohesiveness and provided incentives for young people to continue farming traditions in the Brecon Beacons.
- **Environment:** Producers have been trained in improved environmental management and stock rearing techniques.
- **Cultural:** The Brecknock Hill Cheviot breed has been a key feature of the local landscape for 150 years - this initiative has helped to ensure that this cultural tradition continues in a more environmentally sustainable way.





Farming in the Central Beacons



Shearing time

are hefted to particular parts of the hill. With the decline in the number of people employed within farming, an increase in the average age of the agricultural workforce and limited opportunities for young people to earn a reasonable living within farming, there is a risk that the skills and capacity needed to manage the upland landscape will be lost. There are significant social and environmental reasons for retaining the traditional family farming unit and ensuring that land is at least maintained in “good agricultural and environmental condition” so that it is readily available for food production. Alternative approaches to uplands management would require a fundamental change in tenure systems, resource allocation, funding and training.

Strategic Objectives: Farming

1. Maintain and enhance viable and productive farming businesses within the uplands so that they are able to deliver private and public objectives to enhance the special qualities of the Park.

The primary reason for how land is managed varies, but it is increasingly likely that a number of objectives will be delivered from an individual piece of land requiring integrated approaches to management. Deliverable objectives may cover food production, biodiversity, the historical environment, outdoor access, recreation, renewable energy generation and other benefits. Farm and other land management businesses will remain profitable,

maintaining many of the traditional practices that have helped to shape the special qualities of the Park, whilst being innovative with bureaucracy minimised. Resilience will be increased, for example through appropriate farm diversification and collective management of risks such as from animal diseases.

2. Integrate and promote public support for sustainable farming.

The upland landscape is a critical asset both nationally and relative to the Park. The emphasis of policy is changing from encouraging agricultural and timber production to uplands being areas for recreational pursuits and the delivery of public benefits. However, the continued importance of livestock, particularly larger grazing animals, to the well-being of the uplands needs to be communicated to the public as well as national and European levels of government.

3. Develop communications and collaboration among farmers, land managers, statutory agencies, non-governmental organisations, communities and other interests.

Farming continues to be the most significant element of what needs to be a profitable land management industry. To be successful now and in the future, this will require increased collaboration, local empowerment and innovation among the stakeholders involved.

4. Encourage innovative marketing of farm products, for example through the development of local supply chains and landscape branded products.

Given the changing face of agricultural policy, economics and practice, farmers will need to maximise market opportunities by adding value to goods produced in rural areas, for example by niche marketing, branding and diversification. Farmers can add significant value to their products through marketing and promotion based on local and regional branding - such as the Brecknock Hill Cheviot Marketing Scheme. The aspiration must be that farmers can benefit from being within a protected landscape and thereby continue to contribute to its management.

5. Minimise waste, energy use and pollution from all agricultural activities.

Farming activities provide many public benefits to local, national and international communities, not the least of which is food security. As with any business, however, there are energy requirements, waste products generated and potential sources of pollutants. Careful evaluation and management of farming practices can reduce waste and improve energy efficiency whilst continuing to provide public goods and services. Some farmers in the National Park, for example, are directly involved in the Green Valleys Initiative, generating their own electricity from local, small-scale hydroelectric schemes.

6. Advocate for programmes that reward people for providing public benefits in the countryside, particularly the delivery of environmental goods and services such as energy generation, water capture, carbon storage and biodiversity gain.

Enclosed land generally has a greater potential for agricultural productivity compared to commons, but this is still limited compared to more lowland parts of the country. It is likely that these areas will continue to

need support if the farming systems that have helped create their special qualities are to be retained. Tir Gofal has provided some income to manage features such as hay meadows and field boundaries. However, insufficient resources were allocated to allow the majority of farms to enter. A range of schemes is needed to suit different types of holdings, including common land. A limited number of simple prescriptions may be suitable for a relatively productive unit, for example, whereas a more bespoke scheme may be needed for holdings with higher levels of conservation interest and for landscape scale initiatives. The new Glastir agri-environment scheme will attempt to improve on the Tir Gofal scheme, but it is as yet untested.

7. Support the sustainable management of commons within the National Park including the working of Commons Councils.

The 2006 Commons Act (Wales) introduced a number of measures to try and promote sustainable land management on commons. In particular, Commons Councils are a new mechanism that may be able to reduce the inherent difficulty in making and implementing cooperative management decisions, enabling common rights holders in particular to more easily manage their own affairs and manage commons in an economic and sustainable way.

CROSS-REFERENCE

- 7.1.1 Landscape
- 7.1.2 Biodiversity
- 7.1.4 Historic Environment
- 7.1.6 Culture and Traditions
- 7.1.13 Woodlands
- 7.1.14 Uplands
- 7.3.1 Sustainable Communities
- 7.3.5 Transport

7.1.13. Woodlands

The woodlands are an integral part of the distinctive landscape and natural beauty of the Brecon Beacons National Park. Sustainable woodland and forest management positively contribute to the vision of the National Park by conserving and enhancing diverse habitats within and around the forest, supporting wildlife that depend upon woodlands, creating and maintaining accessible locations for people and contributing to a vibrant rural economy. Four woodland complexes within the Park are SACs and each is very distinct and different. Within the Waterfalls Area, for example, the ravine woodlands survive as temperate rainforests and are rich in biodiversity. Additionally, woodlands can have a significantly greater carrying capacity for people than more open landscapes, being more resilient to natural and human impacts such as weathering and footpath erosion than geographically similar non-forested ecosystems.

Forests and woodlands offer environmental benefits which include the expansion of native woodland, conservation of land within and adjacent to the SSSIs, SACs, and SAMs and the creation, restoration and expansion of valued habitat. They provide shade, increase the infiltration and storage of water, store carbon and provide wood fuel and other raw materials such as timber and fibre.

Woodlands offer a sense of welcoming to people travelling along the numerous scenic drives throughout the Park's valleys and to those who wish to explore the wilder aspects of the more mountainous terrain. They can frame a landscape and help to provide a local setting for settlements.

At the gateway to the southern end of the National Park and Geopark, Forestry Commission Wales (FCW) invites visitors to the Garwnant Visitor Centre and Education Complex. In this area formal recreation is being increased with the more active pursuits being offered, such as mountain biking and outdoor education.

In addition, the successful award of the Fforest Fawr Geopark



Waterfall Country



Garwnant Visitor Centre

status within the National Park offers opportunities to expand on and experience the internationally recognised geological value the National Park and its forests can offer.

Woodlands also offer a sense of well-being to the larger landscape and to the setting and structure of settlements. Woodlands have been a source of local, sustainable building materials for centuries (making an as yet unknown contribution to carbon storage). These benefits can be

incorporated into future development, including residential housing and industrial commercial activities.

Woodland cover exists in the National Park as a combination of public sector forests and private woodland. Public sector forests managed by FCW are in excess of 10,000 hectares (or 25,000 acres) of land in the Park most of which are commercial coniferous plantations, whereas private woodland comprises a mosaic of much smaller, dispersed mainly broad-leaved farm woodland holdings and some traditional estate managed forests. These different scales present different opportunities and challenges for woodland restoration and expansion or reversion to other priority habitats.

On 27th March 2009 Elin Jones AM, Minister for Rural Affairs, reaffirmed that the Woodlands for Wales: The Welsh Assembly Government's Strategy for Woodlands and Trees vision for Wales over the next 50 years continues to be: *"Wales will be known for high-quality woodlands that enhance the landscape, are appropriate to local conditions and have a diverse mixture of species and habitats that will provide real social and community benefits, support thriving woodland-based industries and contribute to a better quality environment throughout Wales."*

Better Woodlands for Wales (BWW) is the FCW grant scheme designed to meet that vision. The scheme has been developed in consultation with woodland owners and their agents as well as partner organisations. The scheme places greater emphasis on good quality woodland management and offers grants specially designed for Welsh woodlands. Grant aid is now based upon an approved long-term Management Plan that meets the minimum standards under the UK Woodland Assurance Scheme (UKWAS).

Forest design is a planning tool for creating a future vision for new and existing forests. Forest design identifies the existing woodland structure, and shows how, by pro-active management of the land, the future forests and woodlands will contribute to an improved ecosystem, whilst maintaining a sustainable resource of both economic and conservation



Talybont Reservoir

value. It considers both the effects on the wider landscape and issues surrounding climate change and species habitats, thereby contributing greatly to the conservation of nature, culture and biodiversity in the National Park.

The management of woodlands and forestry has significant implications for managing historic landscape character as well as the survival of individual historic landscape features. Many historic, native woodlands are historic landscape features in their own right and may include extensive associated archaeological features such as woodland boundaries, saw pits and charcoal burning platforms. Woodland can also preserve earlier historic features which predate tree growth. FCW obtains historic environment information and advice from the Archaeological Trusts to ensure that both FCW estate and BWW Management Plans properly integrate the management of the historic environment.

All woodlands and forests managed by FCW have been assessed by forest design, and approved by the UKWAS. This process is also adopted by private woodland owners wishing to attract grant aid via the Welsh Assembly Government's Better Woodlands for Wales scheme. Forest Design invites consultation from all interested parties, and the Park's stakeholders are active in creating the vision of these forests and woodlands for the future.

The Mynydd Du Forest case study (overleaf) is an example of a forest design plan near Abergavenny and within the north-eastern area of the National Park.

Mynydd Du Forest Design

Mynydd Du Forest lies on the eastern edge of the BBNP, near to the market town of Abergavenny. The forest is situated within a discreet valley, and adjacent to the majestic open hills of the Brecon Beacons. The forest covers an area of 1,200 hectares, and is managed by the Forestry Commission Wales (FCW). The FCW estate covers in excess of 126,000 hectares, of which circa 35,000 hectares is managed by the Llanymddyfri Forest District team, including Mynydd Du Forest.

Mynydd Du Forest is the largest forest in the National Park, which is managed under a combination of clearfell and continuous cover management, including native woodland and heath land restoration. Majestic trees tower over forest entrances throughout the valley, with broadleaf woodland expanding along the streams and tributaries to the Grwyne Fawr River. As the forest rises to the higher elevations, a combination of productive forest and heathland restoration exists.

The forest design identifies the structure of the forest for the future. It captures the forest of today and influences how the evolution of the growing forest will change and adapt to the future. Forest design is a management tool and is recognised as a part of sustainable forest management. All FCW forests meet the UK Woodland Assurance Standard (UKWAS) which demonstrates forests and woodlands are being managed to a high standard.

Sustainable forest management is measured within three tiers: economics, environment and social. Forest management considers all aspects of these three tiers, to ensure a sustainable forest exists in the future.

The forest design vision is identified by the following key issues which will affect future regeneration management.

This forest is one of the larger forests in the area and is capable of growing a mix of tree species which will enhance the future timber markets whilst also considering the effects



of climate change and the potential for migration of species, through a habitat network within the forest. The forest design will enhance these demands by broadleaf riparian restoration, with mixed conifer and broadleaf species throughout the lower elevations of the forest. On the upper elevations, the forest will consist of open space managed to complement the adjacent open hill, whilst enhancing and restoring upland heath habitat to complement the wider landscape of this area. This will further enhance the woodland and forest edge to remove the harsh shapes adjacent to the forest boundary, and further complement the wider landscape of this area.

To ensure sustainable forest management the following specific issues are considered within the forest design process for each of the three tiers:

Environment

Forest design and subsequent forest management will enhance and protect the environment in accordance with relevant EU legislation, with a particular emphasis on recent habitat regulations (August 2007). This will include protecting and enhancing species and habitat, and consider future climate change by creation of habitat networks throughout the forest to allow for migration of species in the future.

Native woodland expansion and increased broadleaf planting will feature prominent in the future forest. The current broadleaf woodland exists as 7% in this area, with a gradual expansion to 33% by a combination of felling and replanting and natural regeneration management.

Landscape of the forest must be considered in two factors:

1) the lower internal valley landscape, where continuous cover and broadleaf forest will exist to promote a sense of

welcoming and habitat network creation alongside existing native woodland and stream sides; and;

2) the upper landscape of the Brecon Beacons, where the forest complements the wider large-scale open landscape. The lower valley offers greater opportunity for species diversity, continuous cover management of the forest, and ancient woodland expansion due to better soils and stability. The upper forest area will complement the adjacent open hill of unimproved upland grazing by breaking up the harsh edge shapes, which exist as the current forest boundary. This will be done by open space management, and some scattering of natural regeneration throughout these areas, whilst offering the opportunity for habitat restoration of the traditional heathland.

Economic

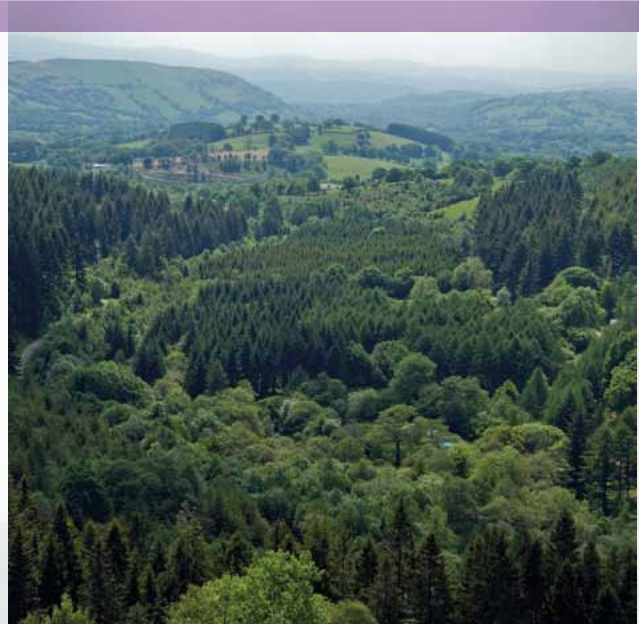
Mynydd Du Forest will continue as an important commercial forest, whilst combining the diversity of species, both conifer and broadleaf, to complement existing, new and emerging markets for the future.

Current harvesting programmes are committed to the wood processing industry for the next five years through published production forecasts. This allows the industry to invest in the short and medium term with confidence, adding to a further sustainable industry. There is little or no change to planned and committed operations for the next five years.

The forest design considers access requirements, and any subsequent road building in the forest. No new road requirements are identified for this period of review in this forest. Liaison with local highways departments, and the local community has identified a preferred compact forest operations period within each five-year programme, as opposed to a continual harvesting impact on the area. The timber marketing strategy has identified this preference.

Social

Mynydd Du Forest is managed by FCW, who invite the public to enjoy the forest as quiet informal recreation. Access



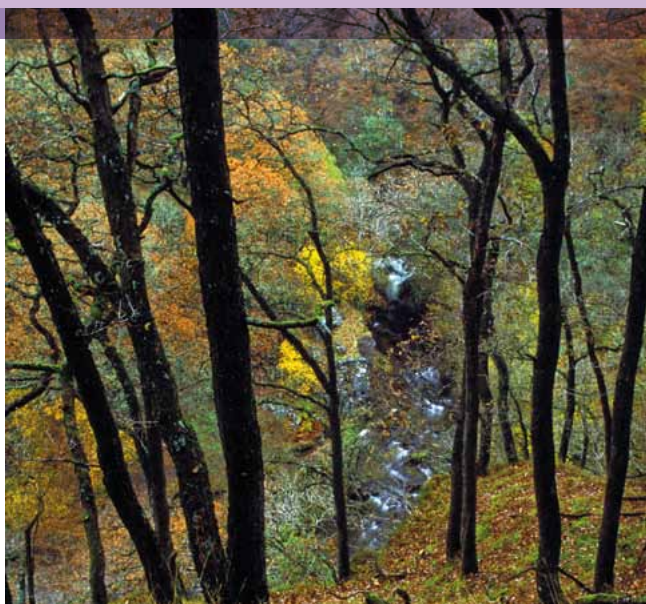
is open on foot, cycle and horse, and all visitors must be aware of other users of the forest, including ongoing forest operations. Car park facilities are present albeit as low key sites. Permissions exist within this forest for organised events, and interest in these activities is increasing. FCW considers this increased interest in the use of the forest, by these specialised activities, whilst still offering the quiet informal recreation throughout most of the year.

The forest design focuses on the lower valley forest area to promote and enhance the visitor experience to Mynydd Du Forest by a combination of majestic conifer trees alongside the forest edge, continuous cover management, and the native woodland enhancement along the stream sides throughout the forest.

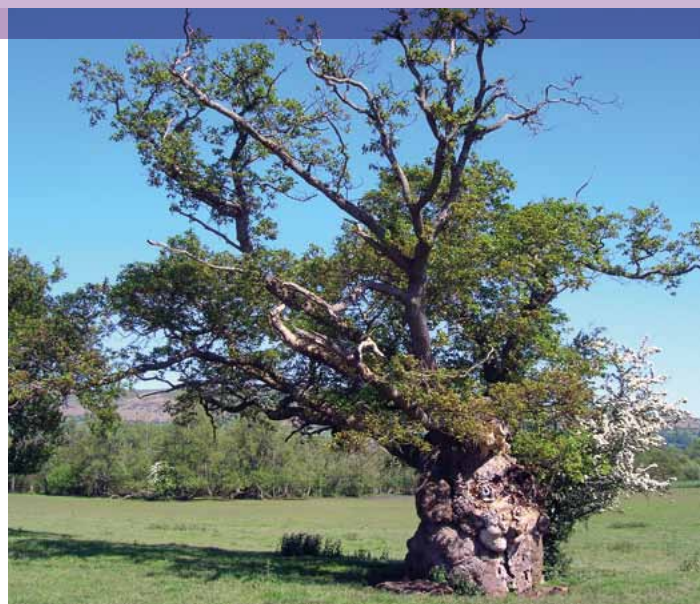
Forest design review is undertaken every 10 years for each forest area managed by FCW, with a five-year mid-term review. This allows for the existing plan to be considered in response to new policy changes, any major effects on the forest, such as catastrophic damage to the forest by climate, and stakeholder demands.

The forest design process has been evident in FCW's forest management structure since the early 1990s, and is an invaluable and robust tool for the forest manager to manage the forest for the future in a sustainable way. Mynydd Du Forest has undergone a forest design review during 2007 and early 2008.

“Great variety of beautiful geography in a compact area”



Woodland in Waterfall Country



Ancient oak tree

Strategic Objectives: Woodlands

1. Capture the existing values of the lower valley native farm woodlands in the National Park and expand these habitats towards the higher slopes where existing forests lie.

This strategic objective enhances the existing landscape and habitats whilst expanding native woodlands in these areas, encouraging the native woodland to migrate into the commercial coniferous forests. These efforts include management of wooded linear habitat. Tree lines grown out of hedgerows, as well as tree-lined streams and rivers, are an important feature of the BBNP landscape, both in defining character and providing biodiversity and connectivity. The present form of features is often the result of semi-abandonment of past practice. Connectivity for some species will rely on enough route options within the landscape, so that rotational management of these features always retains some routes in a suitable form. In addition there may be the potential to incorporate small-scale firewood/hedgerow products into cyclic management of such linear features.

This native woodland expansion will improve habitat networks and connectivity, allowing species to migrate to higher or lower elevations, depending on the pressures

of changing temperature and precipitation patterns that will arise in the future. Designing habitat connectivity into forest plans is one important measure to safeguard the Park's species and habitats given the uncertainty of future climate change scenarios.

2. Manage forests at higher elevations to maintain a sound commercial presence as coniferous forests, contributing to the rural economy whilst offering the opportunity to improve landscape design and create new upland open space via felling.

This open space will contribute to the grandeur and sense of wildness associated with the National Park by creating near-natural areas adjacent to the open commons. Careful management of such creations of open space within a forest and woodland structure, with particular reference to the higher elevations, also can contribute to combating climate change, via creating carbon sinks through restoration of upland peat bogs and heath land. In addition, the opportunity will be taken to preserve and enhance the archaeological and other features of the historic environment. Transitions to native characteristic broadleaves on the upper edge of forests will be used where feasible to soften forest edges and the visual amenity.

- 3. Restore internationally recognised habitats in woodlands, such as upland blanket bogs, upland heathland and upland oakwoods, where the environmental benefit is greater than leaving the area wooded, and where the viability and potential exists.**

Examples of all of these habitats can be found within the FCW managed forests and elsewhere within the National Park. Open space management within FCW's forests not only offers opportunities to create a diverse landscape but also to create new habitat and restore disturbed habitats. In the process these efforts provide good practice models for other private woodlands and forest to emulate.

- 4. Practice continuous cover forestry techniques in suitable forests where appropriate tree species, aspect, age, past management prescriptions and soils permit.**

Continuous cover forest practice is an integral management tool for foresters. It offers the maintenance of permanent tree cover within woodlands. It is the preferred mechanism to maintain landscape sensitive areas and convert plantation to native woodlands on previous ancient woodland sites.

- 5. Integrate where possible the adoption of sustainable woodland management into the Local Development Plan.**

Woodland management contributes to flood defence and to other development-related issues. This is of particular importance within the context of the Park's Local Development Plan with respect to future housing demands and societal needs. Where applicable within water catchment areas, woodlands can offer flood defence mechanisms via the creation of new wet woodland habitats and contribute to reducing the impact of higher water levels downstream and nearer those communities most at risk from flooding. Woodlands can also be grown to provide fuel and other raw materials.

- 6. Facilitate community woodland agreements within easy access of existing and future towns and villages to contribute to local gross domestic product (GDP) and to an improved sense of health and well being.**

FCW's forests and woodlands within the National Park invite quiet informal recreation for both tourists and local residents. The forests provide a sense of public ownership and are an important contributor to the local economy through tourism activities they attract. Local communities also benefit from the forest through the improved health and well-being they provide to those who access these areas. They are recognised as valued assets for today's society.

CROSS-REFERENCE

- 7.1.1 Landscape
- 7.1.2 Biodiversity
- 7.1.4 Historic Environment
- 7.1.14 Uplands
- 7.3.1 Sustainable Communities

7.1.14. Uplands

The Park's uplands provide a virtually continuous expanse of nationally important habitats, common land and open access stretching from east to west across the Park. They comprise the most obvious features of the Park's designated landscape and provide a barometer for the state of the Park's ecological, agricultural and economic health.

The uplands are the core of the National Park's character and form the most southerly area of extensive uplands within Great Britain. They support a complex mixture of important habitats over a very large area and are framed by the ffridd/coedcae zone (sheep walk/wood pasture), the transition zone between the upland and lowland habitats.

The Park includes three of the four contiguous belts of unenclosed upland common of over 4000 hectares in Wales, whose owners include private estates, BBNPA, Dŵr Cymru, the National Trust Wales, the Countryside Council for Wales and The Honourable Artillery Company.

On the whole the Park's uplands are in poor agricultural and ecological condition. This has been caused by factors such as air pollution and acid rain deposition dating back to the 19th Century, trampling and inappropriate grazing levels, repeated burning in certain locations, deforestation and the naturally slow rate of biological productivity that occurs in upland environments. In general, these can be summarised as an absence of integrated, cooperative management between the parties involved. Reversing this situation will rely upon a profitable farming and land management sector and an understanding on all sides of the needs of agriculture and biodiversity conservation, whose varied activities can contribute positively to managing an outstanding natural and cultural environment.

Commons management is made more difficult due to the need to gain a consensus from the multiple legal interests associated with what can be very large areas of poor quality land with marginal economic returns available. There is a risk

that current economic pressures will lead to a structural change in farming systems and consequent loss in land management capability. Difficult issues such as the role of fencing on upland commons to enable sustainable management may need to be addressed. The Commons Act 2006 included measures to facilitate sustainable management, particularly through the establishment of Commons Councils. However, there is likely to be a need to support the establishment of Commons Councils and to provide incentives for them to be able to undertake sustainable land management.

Air, soil, water, carbon and nitrogen are essential to human life, agriculture and biodiversity; they are the "life support" for the living world. They are increasingly prominent in environmental and rural policy and legislation. Each could be affected negatively by climate change. In the Park, sustainable management of these essential resources is dependent upon proper grazing, woodland, fire, water, recreation and access management.

Huge volumes of carbon are stored in soils and peat. Wales' organic soils contain about 410 million tonnes of carbon. Within the BBNP, a high proportion of upland habitats and organic soils are in poor condition and ecological restoration will be a slow process requiring long term commitments to achieve success. Without appropriate action the uplands will contribute increasing volumes of carbon into the atmosphere, thereby adding to the greenhouse effect and global warming. A loss of just 1% per year of soil carbon throughout Wales would increase Wales' overall carbon emissions by 25%, thereby eliminating the same volume of carbon savings made elsewhere. If the average annual temperature in Wales were to increase by just 1°C during the next 20 years, which is almost certain to occur, this sort of carbon loss is likely.

There are some obvious measures to protect organic soil carbon such as maintaining a continuous cover of dwarf shrubs and grasses, avoidance of deep ploughing, matching grazing levels with site requirements, preventing soil erosion and compaction, reversing land drainage and preventing

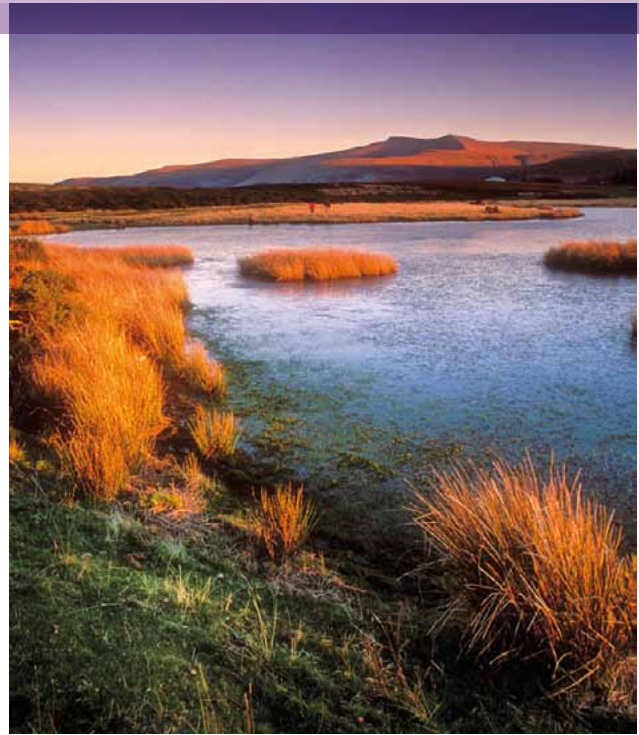


Heather, Pwll Ddu, Bleanavon

uncontrolled moorland burns. As an example, compliance with the new heather and grass burning codes will reduce the risk of uncontrolled burns in the future whilst providing examples of best management practice through the formulation of burn plans that adhere to the new regulations. These measures also deliver benefits related to water conservation in line with the WFD which, in turn, can provide a focus for upland management.

In terms of small-scale, hydroelectricity generation, the Park's upland landscape is ideal: ample rainfall, large, flat areas of deep water-holding soil (storage), storage at altitude above the points of generation and consumption, numerous points of run-off around the upland peripheries and scattered, small, compact settlements at the base of these streams to provide small consumption points.

As the Welsh Assembly Government (2007) has noted, today's farmers - the trustees of this landscape - have a very difficult task ahead of them, to manage the land and its resources in a changing world. It will require conviction and innovative thinking to overcome the uncertainty and risk set before them, particularly on the part of younger people who will have to bear the burden and the costs.



Mynydd Illtyd

BBNPA-owned land

The agricultural and upland common land owned or managed by the BBNPA comprises a very significant asset in terms of its ecological, archaeological and landscape value. Sites include some of the most popular and iconic locations across the Park: parts the Blorenge, the Hatterrall Hill, the Gwernfyed Commons, Henallt Common, Llangasty, Pen y Crug, Mynydd Illtyd, part of the Waterfalls Area and Gunpowder Works, Cefn Llechid, Manor Bach, Craig-y-nos Country Park, Govilon disused railway line, Manor Mawr, Fforest Fawr, Mynydd Du, Mynydd Myddfai-Mynydd Bach Trecastell, Carreg Cennen Woodlands and Garn Goch.

These properties give the Authority its best chance of making a direct contribution to fulfilling Park purposes and to mitigating and adapting to the effects of climate change. By working in partnership with commoners and with the other upland landowners in the Park, action can be taken over large areas, benefiting not only the users of uplands and commons but also the areas adjacent to them.

Strategic Objectives: Uplands Management

1. Identify priority areas for organic soil and wetland management.

Understanding the volumes and extent of soil carbon losses is a first step to reversing this trend.

2. Reduce the extent of invasive species.

Invasive species such as bracken, and invasive alien species such as Himalayan balsam, Japanese knotweed, *Rhododendron ponticum*, Cotoneaster, New Zealand Swamp Stonecrop are all present in the Park. Some, such as bracken are economically and ecologically damaging on a large scale, affecting agricultural land, common land, forest edges and other important habitats. Bracken and many of the other invasive species are expensive to control effectively, particularly on inaccessible upland terrain. Reduction in the extent of invasive species would contribute positively to upland management.

3. Achieve sustainable farming.

By 2020 resource managers need to have developed good practice for managing soil carbon and water conservation in the uplands (Welsh Assembly Government 2007). This requires good practice to be supported by the landowners as well as the commoners. Through a good understanding and close working relationship with upland farmers and commoners, upland management can accommodate the needs of biodiversity conservation, commons grazing, conservation of the historic environment, access, water management and soil carbon management, whilst utilising and developing local skills and knowledge. There is currently a window of opportunity available to concentrate public resources toward achieving sustainable management. This opportunity arises through the Rural Development Plan Axis 2 Review and the comprehensive review of

Common Agricultural Policy by 2013. After this period, pressures may lead to permanent structural changes in farming and loss of hill grazing.

4. Maximise opportunities for growing the local economy.

Economic opportunities are available from managing ecosystems and biodiversity in the uplands and lowlands. Integrated land management can provide additional training, employment and service opportunities beyond the confines of agriculture and tourism. Employment potential exists within surveying and monitoring, wildlife and archaeological interpretation, habitat restoration, farm and estate management, carbon, soil and water conservation and local grazing schemes. Whether alone or in combination with other “new” enterprises - wood fuels, fishing, local food production, renewable energy infrastructure, these opportunities all add up to a much more diverse economy whilst providing the right environment to attract suitable inward investment.

5. Demonstrate integrated, sustainable landscape scale conservation by securing large scale, long term funded projects across the Park.

If Commons Councils are established under the Commons Act (Wales) 2006, this will affect the BBNPA directly, which owns a significant proportion of Wales' upland commons. This presents opportunities to blend farming, conservation and non-farming expertise to achieve integrated management. The BBNPA can work with partners to demonstrate best practice management. Once success is demonstrated on BBNPA-owned lands, projects can be expanded to encompass lands owned and managed by partners. Collaborative landscape-scale schemes should be commonplace by 2020, with farm businesses comfortable with conserving water, soil carbon and landscape, conserving the historic environment, supporting biodiversity and producing high quality, locally marketed food (Welsh Assembly Government 2007).



Airlifting at foot of Fforest Fawr, Brecknock



Bog restoration

6. Ensure that uplands management is conducted through an integrated approach whilst utilising, retaining and developing local skills and knowledge.

Uplands management incorporates the needs of agricultural production, biodiversity conservation, the historic environment, access, water management and soil condition. Commons grazing is the dominant land use in terms of extent across the National Park. The Park's upland commons have been traditionally managed by commoners exercising their rights, which has mainly been through the rights to graze livestock. This is not only a valued cultural tradition, it is vital to the viability of many farm enterprises. Frequently commoners retain the knowledge and skills required to manage the land effectively and pass this knowledge from generation to generation. Most uplands in the Park are also Open Access land and remain an important and valued recreational resource as defined within the CROW Act. The uplands also support the most extensive range of priority habitats in the Park, though the ecological quality is mainly poor. Although the uplands are in poor ecological condition their archaeology often survives in exceptional condition. The management of the uplands recognises the importance of these historic landscapes and the nationally important archaeological complexes which they include. Similarly, dry stone walls, which are

a significant feature of the Park's landscape need to be rebuilt and maintained as part of an integrated approach to upland management.

7. Restore and enhance the habitat connectivity across the Park's contiguous upland commons.

There is great scope for restoring biodiversity beyond designated sites, which is the best way to support biodiversity conservation within the sites and to provide interconnectivity between them. These efforts can, for example, provide the right environment for merlin, hen harrier, red grouse, ring ouzel, golden plover, curlew, lapwing and snipe which are nationally important upland breeding birds. The health and extent of their populations are good indicators of successful biodiversity conservation efforts.

CROSS-REFERENCE

- 7.1.1 Landscape
- 7.1.2 Biodiversity
- 7.1.4 Historic Environment
- 7.1.9 Soil Resources
- 7.1.11 Energy
- 7.1.12 Farming
- 7.1.13 Woodlands
- 7.3.1 Sustainable Communities
- 7.3.7 Military Use of the Park

7.2. Understanding and Enjoying the National Park

The National Park is a unique resource for everyone to enjoy the outdoors and learn more about the UK's most important landscapes and the issues facing these environments. Those who are charged with helping the public understand and enjoy the National Park have a key role in assisting or ensuring the public gain access to the vast range of benefits this area has to offer; and are ideally placed to help everyone understand more about the key issues facing this landscape and protected areas as a whole. It is vital, therefore, that access and orientation are first class, and continually improved where appropriate. Careful visitor management can be very effective in not only making the Park highly accessible to visitors but also promoting understanding and safe enjoyment through the provision of high quality information, interpretation and education.

7.2.1. Outdoor Access and Recreation

Outdoor access and recreation are inherent parts of the Park's second purpose - to promote opportunities for the enjoyment and understanding of its special qualities. The Brecon Beacons National Park offers opportunities for a wide range of air-, water- and land-based recreational activities and for the promotion of healthy lifestyles. Communities within and adjacent to the Park also stand to gain potential economic and social benefits from these activities. The Park is after all a Park for the Nation. The challenge for all involved is to enable all sectors of society to enjoy the Park in legitimate and sustainable ways which do not conflict with the Park's first purpose or detract from its special qualities.

All "open country" (which includes hills and mountains) and registered common land are now "access land" by virtue of and in accordance with the CROW, which provides a right of access to the public on foot. In addition, the Forestry Commission Wales has dedicated its freehold estate as access

land. There are 1983 kilometres of public rights of way in the Park consisting of footpaths, bridleways, restricted byways and byways open to all traffic. The BBNPA has responsibility, delegated from the constituent Unitary Authorities, for the repair, maintenance, signing and protection of this network. It also has the delegated responsibility for keeping the definitive maps and statement (the legal register of public rights of way) of the Unitary Authority areas up to date and has the necessary powers to make changes to the map and statement itself. The BBNPA and its partners ensure that the access restrictions regime associated with access land operates effectively so that legitimate farming activities are not disrupted by walkers and others pursuing recreational activities in the Park. The countryside and people's property and livelihoods must continue to be respected and properly protected. Users of the resource, therefore, have a duty to respect the Countryside Code and practice responsible behaviour to ensure its long-term sustainability.

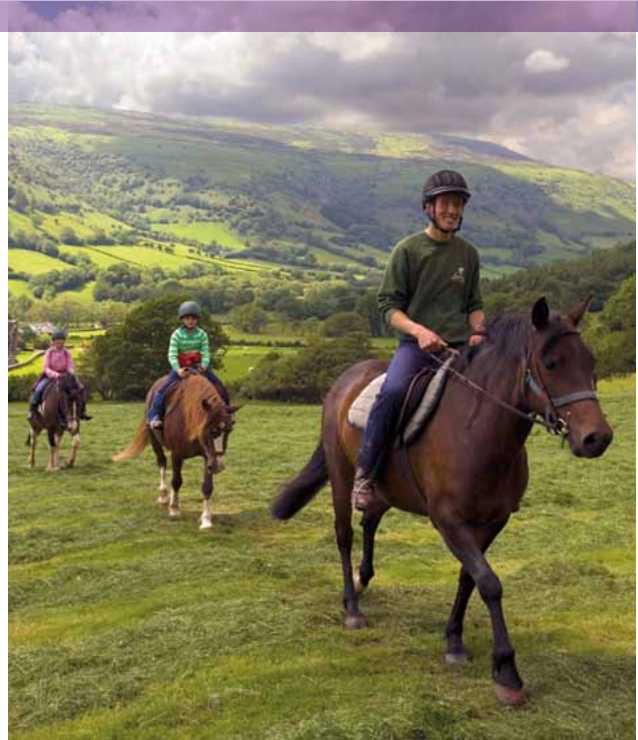
WAG's Policy Statement for the National Parks and National Park Authorities in Wales (2007) indicates that the BBNPA should promote the widest range of opportunities for



Waterfall Country

recreation whilst respecting the Park's special qualities and environmental capacity. The impacts of recreational activity vary greatly, however. Activities often seen as harmful can be benign if properly managed, whilst apparently harmless pursuits can be damaging if practiced on too large a scale or in the wrong setting. At the site specific scale, consideration of a site's designations, conditions and other attributes need to be considered when determining what activities are most beneficial and least detrimental to the long term management of the site. Sustainable management of the National Park requires that both statutory purposes are executed in a balanced manner. In the event of irreconcilable conflict, the needs of conservation take priority. Serious recreational conflict is very rare in the Brecon Beacons National Park and has, in the past, been largely resolved through effective planning and management, negotiation and compromise. Education and information provision also are important elements for conflict resolution in order to increase knowledge of rights and responsibilities and to offer alternative locations for activities that are in conflict with the Park's special qualities.

WAG's Policy Statement agrees that it is not appropriate for all forms of recreation to take place in all parts of the National Park and that some activities can cause unacceptable damage or disturbance. Where these activities are legal, the BBNPA will seek to reduce their harmful effects by negotiation and through good management. Under the NERC Act 2006, the BBNPA has direct powers to make traffic regulation orders restricting or excluding activities from certain areas in accordance with the Road Traffic Regulations Act 1984 and the National Park statutory purposes. The BBNPA will continue to work with its partners to reconcile potential conflicts through effective planning and management. The BBNPA works with many local groups, including the Local Access Forum, which provide advice to the BBNPA and other organisations on the improvement of access. Disabled people are represented via the Disabled Access Action Group through which the BBNPA can ascertain the needs of



Trekking near Llanthony

people with disabilities. The Regional and National Feedback Forums pioneered by the Mosaic Partnership work with the BBNPA, providing feedback from multicultural and urban based users of the Park. Many routes suitable for "access for all" are available in the Park along with a publication providing details of them.

In June 2007 the BBNPA adopted its Rights of Way Improvement Plan (ROWIP). This statutory document is the means by which the Authority plans strategically for the development, better management and promotion of existing local rights of way and changes or additions to the rights of way network. The ROWIP provides a framework to identify, prioritise and plan for improvements to the local rights of way network and in doing so improve provision for walkers, cyclists, equestrians and people with mobility impairments. It has a life of 10 years and sets out the Authority's proposed actions within that time scale.

The ROWIP also states that positive steps should be taken to implement the BBNP Upland Erosion Strategy. The recommendations within the draft Upland Erosion Strategy are cross cutting in that they include access improvements, landscape protection and organisational changes.



Exploring the hills

WAG has also encouraged the BBNPA and its partners to develop the Park as a water-related recreation hub in line with the recent EAW water recreation strategy. Given the ample resources available in the Park (see **Water Resources Section 7.1.8**), there is strong potential to increase participation in water-related recreation by a variety of individuals and organisations including those from Communities First areas; and to develop consensus and understanding between the variety of people and organisations that have interests in the aquatic and recreational environment. The BBNPA will establish a forum together with landowners, DCWW, EAW, CCW, recreational groups and others to develop new and existing opportunities, such as paddling on flat and white water; angling, riverside activities, and aim to provide excellent information to the public to encourage them to use these facilities.

These and other more land-based activities help in delivering WAG's Climbing Higher targets and demonstrate health benefits associated with outdoor access and recreation in the Brecon Beacons National Park.

Strategic Objectives: Outdoor Access and Recreation

1. Strategically manage the rights of way network.

The BBNPA's ROWIP covers a wide range of actions that encompass a variety of topics intended to improve the condition of the rights of way network in the long term. Actions range from increasing the extent of barrier-free routes to maintaining way marking and associated furniture in the network.

A key to successful delivery of the ROWIP and management of the rights of way network is an accurate and up to date Definitive Map and Statement that covers the National Park. As with all strategies, these actions will be implemented in accordance with priorities set forth in the ROWIP and based on the availability of appropriate resources.

2. Improve the provision of information with regard to public access.

The ROWIP identifies several key areas where the provision of information could be improved, including the provision of information:

- In a variety of accessible formats;
- On routes for mechanically propelled vehicles on the BBNPA website;
- On position and extent of parking areas and associated facilities which support outdoor access in the countryside;
- Regarding public transport links to BBNPA promoted routes;
- On codes for responsible recreation, including the Countryside Code; and
- That is better incorporated into Authority publications.

Whilst work has commenced on a number of these areas, the ROWIP's long-term action plan will continue to improve in these areas.

3. Make the best use of external funding and resource opportunities to improve public access.

The Authority recognises that achieving all of the action in the ROWIP, the Upland Erosion Strategy, and other strategies that affect outdoor access and recreation is a huge challenge. Finding the resources to implement these actions is equally daunting. The BBNPA and its partners must therefore make the best use of any opportunities to secure additional resources.

4. Improve access to and on water.

The Welsh Assembly Government has commissioned the Environment Agency Wales to produce a water-related recreation strategy. This strategy outlines in very general terms the role of NPAs in Wales regarding water-based recreation. The strategy recommends that all water-related activities be assessed on a case by case basis with due consideration of:

- The requirements of Habitats Regulations Assessments;
- The Park's statutory purposes, duty and special qualities; and
- Provision of adequate funds for implementation.

Implementation of this strategy's recommendation (relevant to BBNPA) will be subject to BBNPA Members' approval.

5. Continue to work constructively with partners to reduce and resolve conflicts and improve access and recreation provision.

There is already a tremendous amount of partnership working between recreational groups, land owning

interests, regulatory organisations and other stakeholders. Continuing cooperative and collaborative working can act to reduce and resolve conflicts in future. The BBNPA retains the powers granted by the NERC Act and other legislation to restrict or exclude activities from certain areas in the event that these steps fail to protect sensitive areas.

CROSS-REFERENCE

- 7.1.8 Water Resources
- 7.1.9 Soil Resources
- 7.1.14 Uplands
- 7.2.3 Information
- 7.3.2 Sustainable Tourism
- 7.3.7 Military Use of the Park

7.2.2. Promoting Understanding and Enjoyment

Interpretation, information and education are vital tools in encouraging the public to maximise the opportunities for enjoyment, making the most of the benefits the Park has to offer; promoting safe enjoyment and engaging with them on issues which encourage positive behavioural change. There are many issues facing this protected landscape and the environment as a whole, some of which are highlighted in Chapter 5. Only when resource managers begin to engage with the public on these issues can they help show how the problems can be alleviated and how attitudes and behaviours can begin to change. Interpretation, information and education are powerful tools in helping effect this change.

Engaging with all members of society and helping them understand and enjoy the Park helps achieve all of the strategic objectives for the National Park. Everyone has a role to play in addressing the Plan's cross cutting themes (see Chapter 6). In fact only by using these important communication methods can this work be truly effective.



Learning about the Park's Geology

These services contribute to people's understanding and enjoyment of the Park's landscape, wildlife and cultural heritage. They also assist in explaining the Park's purposes whilst contributing to the understanding of the policies and work carried out by the BBNPA and its partners. Such an understanding is important in encouraging people to care for and conserve the Park. This understanding is enhanced through the provision of high quality information, interpretation and education. The aim is to ensure that everyone who lives within the National Park or visits the area will be aware they are within a protected landscape, appreciate what the National Park designation means and understand how everyone can contribute to achieving the Park's purposes and duty.

Interpretation, information and education should be built into all park management sectors and projects to effectively communicate these efforts to the wider community. Particular emphasis should be placed on promoting awareness and understanding of the work conducted in conjunction with local communities and businesses. These partners are most closely linked to the landscape and, therefore, need to be directly involved in developing, funding and promoting their roles in Park management. Their understanding, commitment and support are vital to sustainable park management.

In addition, the Authority and its partners need to ensure that the Park is accessible to all and eliminate any elements which deliberately or inadvertently exclude people. The Park is a national and international resource and therefore has a huge audience range. Providing opportunities for everyone to enjoy the Park and learn from its rich resources will be a

priority. This work should not be necessarily seen as tackling social exclusion but ensuring that all services are inclusive. This includes the information produced electronically, through print or other interpretative media. It also includes accessibility to visitor centres, Park land and specific sites.

Below are the overarching strategic objectives for promoting understanding and awareness as a whole. The sections following these aims break down individual aims for the three main areas involved in promoting understanding and awareness.

Strategic Objectives: Promoting Understanding and Awareness

1. Information, interpretation and education will be at the heart of all projects to ensure the long term support, understanding and commitment for the National Park from visitors and the local populations.
2. Promote opportunities to connect people to the National Park.

The provision of high quality experiences and communication can promote awareness and understanding, which can ultimately influence behaviour, conserving and enhancing the Park's landscape.
3. Ensure that the National Park can be enjoyed by all and that services and facilities do not deliberately or inadvertently exclude people.

CROSS REFERENCE

- 7.1.6 Culture and Traditions
- 7.2.3 Information
- 7.2.4 Education
- 7.2.5 Interpretation
- 7.3.1 Sustainable Communities
- 7.2.3. Information

7.2.3. Information

The BBNPA's Information Services aim to provide a network of high quality information that promotes opportunities for enjoyment in the National Park, key orientation and important messages on safety. Information should reach the widest possible audience, and the BBNPA has developed a range of tools to help achieve this goal.

The BBNPA runs the National Park Visitor Centre (Mountain Centre) and Craig-y-nos Country Park. Both of these centres not only provide information such as interpretive displays, talks and events and opportunities for informal recreation, but they are also visitor attractions in themselves. Their staff, the staff of the BBNPA's networked information centres in Abergavenny and Llandovery and the staff at the Waterfalls Centre at Pontneddfechan provide comprehensive information about the National Park and Fforest Fawr Geopark. Advice is available to visitors on where to go, what to see and how best to enjoy their visit without harming themselves or the landscape. The two networked information centres are Wales Tourist Board approved.

The networked information centres are operated jointly by the BBNPA and the local UA, the latter running the tourist information side with its bed-booking service. Independent, local information centres based in settlements within the National Park are run by local partnerships to provide a service to local businesses and information to visitors about the locality as well as the wider National Park. It also has a purpose-built mobile trailer to provide interpretation at local shows and events.

The BBNPA produces a range of publications to promote understanding of various aspects of the Park, or to help people enjoy their visit. These are mainly marketed through the visitor and information centres, which also sell other relevant literature. They are promoted to retail outlets in and around the Park and to tourism providers. The development of the internet and information technology has increased



National Park Visitor Centre, Libanus



Craig-y-nos Country Park

the communication of information about the National Park to a global audience. Development of new information, interpretation and education materials on the website will continue to widen access and evolve to meet the needs of all audiences.

The BBNPA has many other ways of communicating with the local and visiting public to explain its activities, put across the conservation message and support local communities. These include its guided walks, a range of organised events,

attendance at local shows and giving talks to local groups on request. The BBNPA's Warden Service delivers many of these functions throughout the Park, whilst the BBNPA's Interpretation and Education Services develop materials and offer ongoing support to Park communication efforts. Press releases, editorials and advertisements in the local and national press and other media such as local radio also have an important role to play in raising the profile of the National Park and stimulating interest, discussion and visits to the Park. The BBNPA undertakes this work on its own and in partnership with others. The BBNPA's Welsh Language Scheme includes producing as much of this material as possible bilingually

Likewise, Information Services contribute to sustainability objectives by purchasing catering and other supplies and services locally, printing and manufacturing goods using environmentally friendly materials, providing a market place for locally produced craft items, hosting produce fairs and other events and making its two eco-centres available as venues for community groups.



Taking the Park to the People

Strategic Objectives: Information

1. Provide a first class visitor experience and welcome to anyone interacting with and enjoying the National Park and its special qualities.

The BBNPA will work with information providers in the Park to ensure those who interact with this landscape receive a first class welcome. The BBNPA will also work to ensure that various audiences receive good orientation and are made aware of all the opportunities on offer and how they can access these sustainably. The BBNPA will develop facilities as well as offer training opportunities to ensure this occurs.

2. Provide a holistic and networked dissemination of information which gives visitors the confidence to explore the National Park safely, by working with BBNPA centres, tourism providers and agencies operating within the Park.

Before visitors are receptive to interpretative messages, it is essential that they have their basic needs met (e.g., know the location of the nearest shop or toilet, how far the walk will take them, how difficult the terrain is). The provision of orientation and visitor information at appropriate locations is, therefore, a key component of the visitor experience. If done well this can enhance the visit and encourage visitors to explore a wider range of sites, thus encouraging longer stays and higher spending to benefit the local economy. By strategic networking with partners, all parties can maximise the effectiveness of information dissemination to a wide audience.

3. Increase awareness of environmental sensitivity and sustainability issues to positively influence behaviour.

For visitors to enjoy the Park in a sustainable way, they need information such as timetables and maps to enable them to use public transport with confidence, guides

to interesting places and activities and details of places selling local produce and so on to enable memorable experiences. It is possible to have some influence over what people see and do, and where they go in the interests of visitor management and enjoyment. In order for this to be successful, tourism and conservation organisations must work together to promote the most sustainable use of the Park's resources.

4. The BBNPA will provide a range of information on the National Park, its recreational opportunities and its special qualities to provide a holistic understanding to a range of audiences.

Electronic communication, printed publications and a range of interpretative media will provide targeted information to support those who use the National Park in such a way that it will also increase their understanding and enjoyment of it. All information will contain important messages about why the area is special, the fragile nature of the landscape, the Countryside Code and how everyone can play a role in its future conservation and enhancement. Information will promote sustainable and responsible behaviour.



Guided walks

7.2.4. Education

Education is one of a suite of tools that can aid the Park in its efforts to communicate its purposes, efforts, decisions, results and challenges to interested individuals. Education can be used to make the links among wider issues of management, the environment and sustainability whilst empowering individuals to critically consider available options.

There are many organisations within and around the National Park that offer educational opportunities for a wide variety of audiences. FCW's Woodlands for Learning Team, for example, deliver educational programmes and materials to audiences ranging from primary school groups to adults, many of whom visit the Garwnant Visitor Centre from Rhondda Cynon Taf and Merthyr Tydfil Community First areas. Both the Wildlife Trusts and Archaeological Trusts also provide a variety of education programmes and events throughout the year. Outdoor education centres in and around the Park provide educational materials, events and programmes, too. Many of these centres are funded by Local Authorities from outside the NP. Local Authorities within the NP are involved indirectly in the delivery of outdoor and environmental education by way of their commitments to the National Curriculum. Other organisations, such as CCW and WAG, may be involved indirectly in the delivery of educational efforts through contributions of funding or development.

The BBNPA's Education Service works with partners across the Park to facilitate increased opportunities for learning and take account of developments in the Welsh and National curricula, and other policies which promote outdoor learning. The Education Service and its partners will do this through the provision of unique, Park-focused learning experiences that encourage people to work towards becoming future stewards of the National Park.

The United Nations has designated 2004-2014 as the Decade of Education for Sustainable Development. WAG



Examining mini-beasts



Assessing biodiversity

(2006) released its own document Education for Sustainable Development and Global Citizenship - A Strategy for Action. These efforts emphasise education for and as sustainable development, encouraging behaviour change and more importantly the development of critical thinking skills. These concepts form the foundation of environmental education efforts in the National Park.

The future of the National Park depends on continued, active involvement from diverse individuals from across society who understand and support the principles which underpin the Park's designation as a protected area. Long-term success of the Park also requires that those who care for the Park are not only well-informed but critically use this knowledge in their decision-making.

Consequently, when decisions need to be made about the conservation, use and purposes of this protected landscape, an engaged public will be skilled enough, capable, willing and able to make appropriate decisions. In other words, the purpose of education about the environment "*involves integrating knowledge with decision-making skills through learning*."³⁵ The National Park Education Service along with its partners will strive to attain this integration.

35. Scott, W.A.H and Oulton, C. 1999. Environmental education: arguing the case for multiple approaches. Educational Studies 25(1): 89-97.

Strategic Objectives: Education

1. Raise awareness and promote understanding of National Park purposes, policies and activities.

The BBNPA does much work in the arena of care and management of the National Park's resources and its communities. This good practice and good work should be accessible and useable as a learning tool. The Park is an international, national and regional asset, too, so people across Wales should have the opportunity to interact with the Park as a learning tool. Successfully raising awareness and developing a deeper understanding of the Park amongst future decision makers (both resident and non-resident) will be vital in delivering the vision for the Park.

2. Provide a unique, park-specific outdoor experience that is not available through any other source.

The Education Service will strive to provide a unique experience for learners and educators wanting to utilise the Park as a learning venue. Unique experiences are very important in developing a deeper understanding of, connection to and caring ethic for the Park and the principles it represents.

Case Study

Education for Sustainable Development and Global Citizenship

In 2007 the National Park Authority's Education Service was awarded a grant by the Countryside Council for Wales (CCW) to develop Education for Sustainable Development and Global Citizenship materials. The 3 year project (2007-2010) entitled Learning Through Experience in the Brecon Beacons National Park has focused on encouraging learning in the Park. This project consists of a programme to develop and deliver Education for Sustainable Development and Global Citizenship (ESDGC) activities within and around the Brecon Beacons National Park targeted at Key Stage 3 and Key Stage 4 (11-15 year olds).

The programme will develop ESDGC courses that are led by National Park Educators and also that can be led by teachers, develop mobile learning materials for Wales Biodiversity Week, and deliver ESDGC teacher training days. Courses developed cover the following subject/topic areas:

1. **Development and conservation**
2. **National Park Case Studies**
 - a. Biodiversity
 - b. Managing a protected landscape
 - c. Sustainable communities

3. Ecotourism in the National Park

As a result of this project the following outcomes are anticipated:

- Increased understanding of National Parks and countryside in relation to ESDGC.
- Increased understanding and opportunities for global citizenship.
- Increased understanding of biodiversity and CCW Biodiversity week.
- Increased use of National Parks by teachers to provide learning experience for their students.

The granting organization, CCW, is the Government's statutory advisor on sustaining natural beauty, wildlife and the opportunity for outdoor enjoyment in Wales and its inshore waters. CCW champions the environment and landscapes of Wales and its coastal waters as sources of natural and cultural riches, as a foundation for economic and social activity, and as a place for leisure and learning opportunities. They aim to make the environment a valued part of everyone's life in Wales.



3. Provide learners with the opportunity to have an experience relating to the National Park purposes face-to-face, in the Park, on-line or through written or audio materials.

People learn in different ways. The UK as a whole has seen an increase in, for example, the numbers of students who are home-schooled. All people interested in learning about the Park or using the Park for learning should be aided to do this. They should have assistance accessing learning experiences in a way that suits their needs and allows the Park's key messages to be communicated.

4. Ensure the health and safety of all learners/participants, retaining the Adventurous Activities Licensing Scheme (AALS) status as a minimum standard.

The efforts of carers/educators to get learners out of formal environments and into the outdoors are often hampered by the perceived risks associated with outdoor learning and the anticipated paperwork needed by educators/administrators to do so. The BBNPA holds an Adventurous Activities Licence and demonstrates best practice in the running of all its activities.

5. Provide learners with an enjoyable experience of the National Park.

Engendering long term support for the National Park means making it a place where learners and educators have enjoyable experiences and then return to their daily lives to share these positive experiences with others.

6. Create learning opportunities for all, including those who have not traditionally had such opportunities in the BBNP.

Traditionally the prime users of BBNPA educational services have been primary schools from more affluent areas and, with respect to residential study within the Park, certain groups from more affluent parts of England.

Some organisations, such as FCW, receive a greater mix of audiences who partake of their educational services; many of these groups come from Community First areas. In the development and focusing of learning opportunities, more socially excluded groups will be targeted (i.e., Communities First areas) and aided in learning in the Park. For residential study the Education Service will encourage more groups from across Wales to participate.

7. Demonstrate the principles of sustainability through learning materials and in practice and by supporting Eco-Schools and attaining and maintaining Eco-Centre status for BBNPA centres.

The Welsh Assembly Government has set targets for schools across Wales to gain Eco-School status as part of the Environment Strategy. The BBNPA and its partners will continue to support schools as they seek this status and also achieve the comparable Eco-Centre award for the Park's three learning centres: the National Park Visitor Centre, Craig-y-nos Country Park and YHA Danywenallt National Park Study Centre.

8. Work with internal and external partners to promote and implement the effective and safe use of the Brecon Beacons National Park for learning.

The BBNPA's Education Service can only interact with a limited number of learners. Therefore it is important that the BBNPA partner with organisations such as the Association for the Heads of Outdoor Education Centres (AHOEC), FCW, ATs, WTs and others to promote learning within the National Park, and to support their endeavours. Other partners include the Youth Hostel Association (YHA) with whom the BBNPA currently partner to provide residential opportunities.



School visit, Usk Valley

9. Meet the needs of learning providers through the continued development and provision of learning services, including those in Welsh.

BBNPA education staff and their partners provide services to schools, colleges, outdoor education centres, public organisations, home educators, universities, youth groups, adult learners and others. There are currently many National Park and partner staff involved in education provision who are able to deliver services through the medium of Welsh. Similarly, most education partners deliver written materials in Welsh where practicable. Further improvements will continue to be made to the availability of written (print/web-based) media and for supporting staff to develop the skills to achieve this aim.

10. Enable educators to learn how to utilise the National Park as a place for learning (i.e., through training days).

Educators experience many barriers to bringing learners out of the classroom setting and into the outdoors. These barriers can be overcome through the provision of INSET days for teachers and training (familiarization)

days for non-school based educators to highlight specific opportunities, content or safety aspects. The Education Service will continue to develop and deliver these services as part of an “educate the educator model!”

11. Incorporate national and international education efforts (e.g., UNESCO decade for ESD, Curriculum Cymreig 2007/8) into the Education Strategy as they arise.

The current Education Strategy runs from 2007-2014 in line with the UN Decade on Education for Sustainable Development. This strategy is an iterative document that aims to be flexible and forward thinking in order to adapt to and include the knowledge and expertise and ideas generated for the benefit of creating great learning experiences in the National Park.

CROSS-REFERENCE

- 7.2.3 Information
- 7.2.5 Interpretation
- 7.3.1 Sustainable Communities

7.2.5. Interpretation

Interpretation is the process of connecting people to a place or object, so that they may enjoy it more, understand their heritage and environment better and develop a positive attitude to conservation.³⁶ Interpretation is an incredibly powerful tool to help deliver the National Park's statutory purposes and duty as it can facilitate understanding and appreciation of the National Park which can ultimately influence behaviour resulting in increased support and conservation whilst enhancing the socio-economic well-being of local communities.

There is often confusion between information (e.g., opening hours, location of facilities, orientation within a site) and interpretation. Although interpretation does include information, to be truly effective interpretation must have the following qualities:

- **Organised** - Ensuring the BBNPA and its partners meet the basic needs (Maslow's hierarchy of needs) of visitors so that they are receptive to the message.
- **Enjoyable** - The majority of visitors who visit sites in the National Park are there for a recreational day out; they are not visiting for a formal learning experience. Therefore messages need to be embedded in fun and enjoyable activities.
- **Relevant** - Using universal qualities to connect people to places (e.g., survival, food) using non-technical language.
- **Thematic** - An interesting and thought provoking theme that visitors will take home with them.³⁷

Interpretation can take a variety of formats including guided walks, graphic panels, art, re-creations, events, audio, publications, websites and exhibits. The BBNPA and its

36. Association of Heritage Interpretation.

37. Ham, Sam H. 1992. Environmental Interpretation: A practical guide for people with big ideas and small budgets.

partners use these tools to deliver the Park's Interpretation Strategy. Whilst the focus is on interpretation efforts within the Park, collaborative projects are encouraged across Park boundaries where appropriate.

The BBNPA's Interpretation Strategy (2007) identifies the following issues:

- Limited coordination between organisations delivering interpretation within the National Park resulting in duplication, wasted resources and uncoordinated visitor information.
- Little understanding of the value of the interpretative planning process amongst those delivering interpretation.
- A traditional approach to interpretation with a heavy reliance on panels and leaflets which are the least effective media.
- A focus on end product rather than process, where process can be a great way to engage with communities and traditionally excluded audiences.
- Limited use of thematic story lines which result in non-memorable interpretative messages which, in turn, are less likely to result in sought after behavioural outcomes.
- Limited research and evaluation of the visitor experience and the effectiveness of the interpretative media.
- Limited maintenance budgets resulting in out of date and/or broken interpretation.
- Limited use of sustainable materials, local artists and crafts people to develop green, innovative and locally distinctive interpretation.

The BBNPA's Interpretation Strategy (2007) was developed to help address these issues, and the following strategic objectives will support these efforts across the Park.

Case Study

Bringing the Life and Works of Henry Vaughan to Life

An exciting historic literary project in the Talybont valley

The Henry Vaughan walk was a successful partnership project involving the Community, the BBNPA as well as local experts, craftsmen and artists. The idea for the walk was put forward by residents of Talybont-on-Usk under the auspices of the Community Council. It brought together the desire to commemorate the Vaughan brothers who lived in the Usk valley in the 17th century and a need to improve access on a popular local route.

The National Park Interpretation Officer worked closely with the community to bring the fascinating story of the Vaughan Brothers to life so that it was relevant and interesting to modern visitors. This was done with a combination of media including interpretation panels, interactive poetry posts, an herb garden and a leaflet. The Wardens also played a pivotal role by liaising with contractors and landowners to arrange for the installation of new benches, stiles and way markings to improve access. In addition the Community Team assisting with the grant received funding from the Sustainable Village Enhancement Scheme, Sustainable Development Fund, and Article 33 (Powys Council and WAG DEIN).

As a result of this project the following outcomes have been realised:

- Successful partnership with the BBNPA supporting a local community to define and present their cultural heritage which will increase people's appreciation of the area leading to a wider feeling of stewardship.
- A pro-active approach to interpretation planning enabled a creative and innovative

Henry Vaughan Walk, Talybont

approach to be taken which also promotes good practice.

- An enjoyable walking route in which the learning element is subtle but a clear understandable message is communicated helping to create a sense of place.
- The majority of the work was carried out by local experts, craftsmen and artists, thus supporting the local economy and reducing transportation costs and emissions.
- A well promoted and waymarked route to help give people confidence to explore the National Park safely. As well as physical access to the route, intellectual access to the local heritage was also maximised.

The experience gained from this project has led to the development of a Walking and Interpretation Toolkit which can be downloaded from the BBNPA website.





Biodiversity activities at Llangorse



Interpretive panels at Cwm Porth

Strategic Objectives: Interpretation

1. Encourage partnership working between those involved in interpreting the National Park to ensure greater coordination and better use of limited resources.

Interpretation is delivered by a wide variety of statutory bodies, charities, organisations, communities, clubs and societies within the Brecon Beacons National Park. By working together the BBNPA and its partners can create a high quality, seamless visitor experience that raises awareness of the area's special qualities.

2. Raise the profile of interpretation and the promotion of good practice to improve its quality and effectiveness within the National Park.

The Interpretation Strategy identifies a tendency for interpretation within the National Park to take a traditional approach with an emphasis on panels and leaflets. The proactive promotion of good practice, especially the role of interpretative planning, to BBNPA staff, partner organisations and communities together, will be an important step in achieving more creative, innovative and effective interpretation.

3. Encourage thematic interpretation based on the key themes outlined in the Authority's Interpretative Strategy.

Themes are the one thing visitors need to remember; they are the take home message, the moral of the story. Themes can turn the communication of unconnected

facts into a memorable story; they ensure that the interpreter has thought about what they want the audience to understand and they can help organise ideas and edit content. Themes are beliefs and beliefs are the building blocks of attitude and behaviour. In order to influence these in the National Park, themes need to be strong and compelling.³⁸

4. Provide enjoyable interpretative services that will greatly enhance the quality of a visit to the National Park.

The majority of people that visit the National Park are not there for an interpretative experience but because they perceive it to be an enjoyable day out or a chance to take part in recreational activities.³⁹ Furthermore most people remember only about 10% of what they hear, 30% of what they read, 50% of what they see and 90% of what they do.⁴⁰ To be successful in communicating to visitors, then, messages need to be embedded in fun, enjoyable activities, in which the learning element is subtle.

5. Enable and support local communities in defining and presenting their cultural heritage stories.

In recent years there has been an increase in community-led interpretation projects within the National Park. The

38. Ham, S. 2004. Making meaning: some thoughts on goals, objectives and themes in *Dehongli Cymru/Interpret Wales*, Spring 2004, Issue 1.

39. Veverka, J. A. 1998. *Interpretative Master Planning*. Acorn Naturalists, Tustin, California.

40. Lewis, William J. 1998. *Interpreting for Park Visitors*. Eastern National Park & Monument Association. PA.

process of developing an interpretation project (i.e., the historical research, the collection of stories, photos, partnership working, etc.) is often as important a process for helping communities develop a wider feeling of stewardship for their environment - a sense of place, as the final product.

6. Promote locally distinctive, sympathetic and sustainable interpretation.

The use of local crafts and skills and/or locally sourced materials can sometimes communicate more about the special qualities of an area than other, more traditional forms of interpretation, whilst supporting local businesses and promoting a sense of place.

7. Develop socially inclusive interpretation that is accessible to the intended audiences.

Not all visitors to the National Park are the same. Understanding their varied needs, interests and aspirations is fundamental to effective interpretation. Projects that aim to involve “excluded” groups, such as youth groups in the creation of a sculpture can foster a feeling of stewardship and hence reduce vandalism. Maximising accessibility is about much more than just ensuring that minimum text sizes are used; accessibility needs to be considered at the project inception stage rather than as an afterthought.

CROSS-REFERENCE

- 7.2.1 Outdoor Access and Recreation
- 7.2.2 Education
- 7.2.3 Information
- 7.3.1 Sustainable Communities

7.3. Economic and Social Well-being of Local Communities

The Environment Act 1995 emphasised the importance of the economic and social well-being of local communities to the long-term sustainability of the Park and its special qualities. People are an integral part of the landscape; they have been instrumental in shaping its current form and will continue to contribute significantly to its formulation now and in the future. All of the sections described in **Chapter 7** are dependent on the involvement of local communities to realise their strategic objectives. This section, however, focuses more on the provision of processes and infrastructure needed to ensure the socio-economic well-being of the Park’s communities and build resilience to future changes - such as climate change (see **Chapter 5**) - whilst conserving and enhancing the Park’s special qualities. This remit extends far beyond the scope of the BBNPA, reaching from the Welsh Assembly Government (WAG) to individuals within each community. Most importantly, though, this effort entails empowering people to become actively involved in decision-making and management endeavours that impact the future of their communities, towns and villages within the context of the Park’s purposes.

7.3.1. Sustainable Communities

The Brecon Beacons National Park has a population of about 33,000, concentrated in the Usk valley between Brecon and Gilwern, and in the Clydach Gorge between Gilwern and Brynmawr. The main settlements are Brecon (pop. 7,900), Gilwern, Hay-on-Wye, Crickhowell, Talgarth and Sennybridge. There are many smaller villages, hamlets and scattered farms.

Although agriculture has long been the basis of the Park’s economy, only a tenth of the working population is now directly employed in it. Public, financial and other services are the main employers of Park residents, followed by distribution and catering. As with all rural areas, the centralisation



Hay-on-Wye market

of shopping and other services and reduction in public transport have radically affected the way of life. These factors have exacerbated the volume of commuting from the Park to urban centres and into the Park from areas of lower cost housing. One consequence has been a dramatic increase in private car use.

The vision for the National Park includes healthy and socially inclusive communities and a sustainable, thriving economic, social and cultural life. The BBNPA and its partners in pursuing its two statutory purposes have a duty to “seek to foster the economic and social well-being of local communities.” Both affordable housing and employment issues have been raised as central issues related to local community needs. The BBNPA does not have a primary responsibility for economic development and does not function as a housing authority, but it is an important catalyst in its role as Local Planning Authority, allocating land for development and community needs. Major components of the local economy, especially agriculture and tourism, are directly related to the Park’s statutory purposes. Over 2,700 jobs and more than £40 million are generated in the National Park by environmentally linked economic activity, approximately twice the Wales average. The position of the National Park close to industrial South Wales is important in attracting industry, too. Thus the BBNPA’s work makes a direct contribution to economic life.

The BBNPA’s approach to this duty is rooted in its commitment to sustainability. Sustainability as it applies to community development implies that people devise their own strategies for promoting long term investment in social capital to make their community, environment and economy healthy and vibrant for the long term. The concept of sustainable communities is supported by the Wales Spatial Plan and

the Assembly Government’s One Wales - Connecting the Nation, Wales Transport Strategy. Strategic objectives herein also support the Assembly’s proposed development of sector targets for carbon emission reductions as well as improving access to services and facilities for those who do not have private transport. The Government’s priorities for sustainable communities include climate change, economy, health, education and social inclusion.

The long-term sustainability of BBNPA policies is dependent on good working relationships with other agencies and with local people. With this end in mind, the three Welsh NPA’s will:

- Involve local people in the development of appropriate policies and recognise the strength and value of local aspirations and skills as well as the importance of national designations and approaches;
- Seek to ensure that all sectors of the local population have an opportunity to participate in this process;
- Assist local communities to meet the obligations of and realise the opportunities provided by sustainable development despite any handicaps resulting from remoteness or a narrow economic base.

With respect to the BBNP, the BBNPA and its partners deliver these aims through a variety of means, including their Disability Equality work and policies, the BBNPA’s Sustainable Development Fund, the Green Valleys Initiative and many other programmes promoting social and economic sustainability. Much work is also being conducted by the Local Service Boards by way of the Rural Development Plan and Community Strategies.

Community councils represent local democracy at the grassroots, and the BBNPA has a statutory responsibility to consult with them over development control issues. In addition, a close working relationship with the 50 councils in the Park is of mutual benefit in achieving the NPMP’s objectives and improving the quality of life locally.

Strategic Objectives: Sustainable Communities

1. Prepare the National Park communities for climate change and fossil fuel depletion by building resilience to ensure minimised economic and social impact.

Climate change is likely to alter the future way of life for the Park's communities, including: extreme weather events, hot and dry summers, wetter winters, agricultural changes, water shortages and demographic changes as UK and world populations migrate. Predictions of the effects of peak oil vary, though the potential impacts may be just as significant and may affect people more dramatically in the short term than climate change. A decline in oil production given continued growth in consumption will most likely reduce the affordability and availability of fuel for personal and commercial transport, for instance, which may in turn significantly increase living costs (e.g., for food production, heating and energy costs and transport).

2. Reduce direct and indirect production of greenhouse gases by the National Park's communities.

Everyone needs to reduce the production of greenhouse gases if humanity is to limit the potential impacts associated with human-induced climate change. The communities within the Park are expected to play their part in achieving national targets designed to mitigate climate change. Where possible, the Park's communities should also demonstrate innovative means for achieving these targets. Strategic objectives related to transport options, the major sector contributing to the national carbon footprint, are addressed in the Transport section **7.3.5**. Renewable energy objectives are discussed in the Energy section **7.1.11**. These efforts will require integrated actions across all sectors of the Park to reduce its communities' contributions to greenhouse gas emissions.

3. Support and enhance local production and local economic supply chains.

There are widely recognised benefits in strengthening local supply chains. Economically, the multiplier effect of local purchasing means more money is retained in the community. Socially, local links are strengthened and social enterprises help deliver multiple benefits. Environmentally, greenhouse gas emissions, particularly carbon dioxide production, associated with transporting goods, services and customers are reduced. To achieve this strategic objective, the BBNPA and its partners will need to: strengthen local production of goods (e.g., food and added valued food products), strengthen local production of services (e.g., recycling, energy production), strengthen social enterprise, and support and enable local purchasing. The BBNPA, with other bodies, is able to use its contacts and expertise to help communities retain, provide and improve facilities and amenities. This in turn can help communities to remain viable, in line with the vision for the Park.

4. Address and breakdown actual and perceptual barriers experienced by socially excluded groups.

An Audit of Social Inclusion in the three Welsh National Parks highlighted a range of actual and perceptual barriers to accessing the Park amongst excluded groups from within and beyond the Park boundary. It is implicit in the Park's second purpose that enjoyment and understanding of the National Park is for all. It is the responsibility of the BBNPA and its partners then to ensure that, where practicable, barriers are addressed.

5. Ensure that all sectors of the Park's communities are able to contribute to development of, appreciate the benefits of, and play a part in the delivery of NPMP objectives.

Development and delivery of the National Park Management Plan involves careful consideration of

community aspirations. Integration of the NPMP with Community Strategies facilitates this process, reflecting community aspirations for economic, social and environmental well-being. Successful integration requires the BBNPA to actively pursue partnership opportunities. By the same token, integration requires commitment on behalf of communities as well as voluntary, private and public sectors to delivering the NPMP objectives. Consequently, the BBNPA have and will continue to involve key stakeholders from all sectors across all the Unitary Authority areas in the Park.

6. Promote the National Park as an exemplar of sustainable living.

In the next twenty years, the National Park will be home to self-sufficient communities that, amongst other achievements, produce food locally, generate a high proportion of their energy needs from renewable sources, exhibit highly efficient building designs, have developed sustainable and effective means of meeting transport needs and have enhanced biodiversity. The result would provide benefits for local communities, regeneration efforts, the environment, Highways Authorities, the tourism industry and local businesses.

CROSS-REFERENCE

7.1.5.	Built Environment
7.1.8	Water Resources
7.1.1.1	Energy
7.2.4	Education
7.3.4	Planning and Development
7.3.5	Transport

Sustainable Development Fund (SDF)

Aim

Through partnership, to develop and test ways of achieving a more sustainable way of living in a countryside of great natural beauty and diversity in which the local characteristics of culture, wildlife, landscape, land use and community are conserved and enhanced.

Objectives

- To explore ways of meeting concurrently the four principles of sustainability and of breaking down barriers that can act as obstacles to sustainability.
- To develop models for the sustainable management of the countryside that could be applied more widely in Wales.
- To generate greater awareness and understanding of sustainability.

Four sustainability principles:

- Social progress which recognises the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources; and
- Maintenance of high & stable economic growth & employment.

Eligibility

Projects will have to:

- Be sustainable - link social, environmental, cultural and economic issues through public participation;
- Demonstrate genuine support or involvement of communities within the Park;
- Support one or more of the objectives of the scheme;
- Be complementary to key local and national strategies;
- Bring organisations together in partnership to tackle problems;



Llangattock allotments

- Be compliant with the principle of treating the English and Welsh languages on a basis of equality in dealings with the public (e.g., publicity, literature and signage) as set out in the Welsh Assembly Government's Welsh Language Scheme.

Priority will be given to projects that:

- Overcome institutional arrangements, relationships and cultures that may be creating barriers to sustainability;
- Demonstrate innovation or best practice;
- Involve young people;
- Support community based sustainable transport initiatives designed to reduce their carbon footprint;
- Support sustainable visitor transport initiatives, including access to visitor "hot spots";
- Support sustainable food marketing and the promotion and consumption of local produce;
- Promote the sustainable use of water resources, through the support of projects designed to promote access to water;
- For which no other resources exist;
- Which lever in contributions from other sources (in cash or kind);
- Add value or new dimensions to existing sustainability projects;
- Promote wider understanding of sustainability;



Hydroelectric turbine, Talybont Reservoir

- Support local disadvantage and disabled groups;
- Derive support from and provide support to local businesses;
- Encourage social inclusion.

Projects outside Park/AONB boundaries

Whilst projects are designed to support communities within Park and AONB boundaries, there is flexibility to support projects in communities immediately adjacent to Park and AONB boundaries to encourage closer links between those communities and Park and AONBs.

Transferability

Where appropriate, SDF Officers should discuss with applicants the possibility of supporting projects which can be replicated elsewhere.

Grants

The scheme will provide project grants, management grants (to support staff costs) and development grants (to provide a catalyst for new action or partnerships). Grant rates will normally be set at 50%, plus an appropriate element for overheads (10%), but up to 100% will be available in exceptional circumstances.

7.3.2. Sustainable Tourism

Tourism is the industry that encourages people to enjoy the National Park and which provides facilities and services for them. It is an essential component of the economy of this National Park which hosts over 3.6 million visitors each year. Tourists, in turn, have a significant effect on sustainability in the Park. They may create pressures that affect the environment and the lives of Park residents, through their use of private cars for transport to and within the Park for instance.

Simultaneously, the industry is itself dependent on the Park's healthy environment, special qualities and attractions. The Park is an iconic landscape, the value and significance of which are consistently cited as the main reason that visitors choose to come to Wales (Visit Wales Visitor Survey 2006). The tourism industry is more reliant than many other industries on free access to a wide range of public goods and services such as the Park's rural landscape and biodiversity. Tourists pay for some of the facilities and services which they use, particularly those provided by the private sector; but there are many services which benefit tourism that visitors do not contribute to. Tourists take their holidays in other people's homes, imposing costs on the destination and its residents as well as providing local benefits. A sustainable approach to tourism manages the impact of visitors on the local destination area's economy, community and environment to benefit everybody - visitors, local communities and the Park as a whole - both in the present and in the future.

Tourism supports a wide diversity of businesses including the accommodation sector, local food producers, attractions such as the Dan yr ogof Show Caves, historic buildings and activity centres. It has the potential to make a very positive contribution to sustainable development. Tourism can build strong links with agriculture which can be developed to mutual benefit. It has the potential to support the many rural shops, pubs and businesses of great importance to local people, and it can contribute to the regeneration of communities with a strong industrial heritage story to tell



A family visit to Llanthony Priory



Socialising, Crickhowell

such as is being implemented at the Blaenavon WHS.

For tourism to become truly sustainable, the sector has to become more sophisticated in analysing the associated costs and benefits so that the benefits of attracting visitors are

captured by more than a few local businesses to justify the costs to the destination and its residents.

In 2006 the Brecon Beacons Sustainable Tourism Partnership approved a Sustainable Tourism Strategy for the BBNP as a destination. The Partnership involves a wide variety of stakeholders, from private businesses to Unitary Authorities and tourism bodies.

The Strategy was developed over 18 months of intensive consultation and discussions. It is for all partners to implement and is based on the sustainable management of the destination as a whole - not just the development of tourism as such but the management of that tourism and the impacts it has so as to protect the environment on which it is based.

The vision for the Tourism Strategy is:

“By 2020 the area will be an exemplar of sustainable tourism development in protected areas, building on: a strong sense of place, the indigenous natural and cultural heritage of the Brecon Beacons, and a reputation for quality built upon communities, public sector and business interests working closely together to exceed the expectations of visitors.”

The Strategy was submitted to the Europarc Federation in February 2007 as part of an application for the European Charter for Sustainable Tourism in Protected Areas which was subsequently awarded to the BBNP in Cesky Krumlov (Czech Republic) in September 2007.

Visit Wales, Regional Tourism Partnerships, the Heads of the Valleys Partnership and UAs also have strategies for tourism. Visit Wales is responsible for developing tourism in Wales, and its strategy document, *Achieving Our Potential*, endorses the partnership approach adopted by the BBNPA. The BBNPA sees its role as maintaining coordination and dialogue between the players within the Park. The partnership based tourism strategy aims to increase sustainability by ensuring social, economic and environmental benefits.



Cycling near Llangorse

Strategic Objectives: Sustainable Tourism

1. Invest in well researched, planned and coordinated product development based on the natural strengths and culture of the area.

Tourism is considered to be a key priority for sustainable development in rural areas such as the Brecon Beacons National Park. It is an industry particularly sensitive to sustainable objectives both because it is the environment that is its key resource and because the key markets for its products are themselves sensitive to these messages. Under the European Charter for Sustainable Tourism model, local communities are involved in guiding the development of tourism in their area and an aim of the Strategy is to encourage them to undertake tourism in their own right. The model ensures that tourism must be implemented through a partnership approach based upon piloting new ideas, defining clear roles and responsibilities, and committing to sustainable tourism principles.

2. Continue to improve the understanding of tourism trends, market behaviour and the business of tourism in and around the National Park.

Knowledge of the state and trends associated with a resource is the cornerstone to successful management. Tourism is no exception to this principle. Increasing

amounts of data are available that are Park-specific and this will be built on using a coordinated approach to research. Profitable investigations include: visitor satisfaction surveys, economic baseline data, visitor carrying capacity and the development and monitoring of agreed sustainable tourism indicators.

3. Refine the tourism organisational structure to help create a stronger partnership approach involving all key stakeholders.

The Brecon Beacons as a National Park and as a tourism destination sits on the intersection of a wide variety of administrative boundaries. Not only are there nine Unitary Authorities with land inside the Park boundary, but Authorities outside the boundary are impacted upon by the Park's tourism activity. In addition, three WAG regions cross the Park. Even at a national level, the needs of England, particularly in the shape of Herefordshire which borders the Park, have to be taken into account. Consequently, there is a need to form a functional organisational structure through which tourism bodies can continue to improve communications and consultations, and the delivery of strategies/ programmes/ actions. In 2002 such a body was set up that has now evolved into the Sustainable Tourism Partnership. A core part of the BBNP Tourism Strategy involves developing and evolving this body to better serve the needs of the destination.

4. Encourage collaborative marketing activities based upon the Brecon Beacons brand.

This has evolved as part of the Britain's Breathing Spaces project and its Welsh derivative with substantial investment on behalf of partners. The BBNP Tourism Strategy aims to harmonise the promotional activities of partners and enhance the economic benefits of tourism. Tourism supports agriculture and the economy by providing both additional income and a market for local produce and services, for example: A national park has a

strong brand image which can be used in the promotion of sustainable tourism. Use of this brand image can also capitalise on opportunities created by being a member of the family of national parks, as well as those created by being part of tourism in Wales.

5. Enhance the National Park experience for all people, residents and visitors alike.

A sustainable approach to a better National Park experience requires integration with other activities, strategies, policies and activities throughout the Park. Developing an integrated approach to the delivery of a high quality experience within the National Park is based upon a collaborative and coordinated approach to encourage people to stay longer; spend more money and to have a greater appreciation of the special qualities of the National Park. People who come to appreciate the National Park are more likely to care for and protect it and its resources.

6. Manage the impacts of tourism.

Sustainable tourism helps visitors appreciate the need for conservation; with good management, more visitors can be welcomed to the Park with fewer adverse effects. A sustainable approach to tourism helps create better places for people to live in and for people to visit, with the emphasis being placed on the residents of the destination area. However, inappropriate development, lack of management, or excessive visitor numbers can degrade the environment and long-term economic and community benefits. In the context of managing a protected area, Section 62 of the Environment Act states that public agencies such as Visit Wales are constrained to ensure that their actions do not adversely affect the integrity of the National Park's special qualities. The Sustainable Tourism Strategy was therefore developed in an effort to integrate various strategic objectives related to tourism and visitor management. The Strategy's course

Case Study

of action commands wide support across the broad strategic arena. It is this exercise in integration that formed the basis for the award of the European Charter. The Charter requires that impacts associated with tourism activities are monitored and subsequent management actions are taken to reduce adverse impacts on Park resources.

7. Realise fully the tourism potential of the Monmouthshire and Brecon Canal whilst its attractive setting is conserved and enhanced.

The Monmouthshire and Brecon Canal is a key component of the Park's landscape, regional history, local culture and ecology. Because of these and other factors, it is a key tourist attraction within the National Park. The Canal allows people to enjoy the special qualities of the Park through a variety of transport options. It is the aspiration of this Plan that the Canal will continue to be well-managed for its landscape, ecological, social and historic values and as a linear routeway for sustainable transport on foot, by bike and by boat.

CROSS-REFERENCE

7.1.1	Landscape
7.1.4	Historic Environment
7.1.6	Culture and Traditions
7.1.12	Farming
7.2.1	Outdoor Access and Recreation
7.2.3	Information
7.2.4	Education
7.2.5	Interpretation
7.3.1	Sustainable Communities
7.3.3	Fforest Fawr Geopark
7.3.5	Transport

European Charter for Sustainable Tourism in Protected Areas

The Brecon Beacons National Park was awarded the European Charter for Sustainable Tourism in Protected Areas in 2007, providing innumerable benefits to the Park and its communities. By subscribing to the Charter, the Park “chooses to adopt tourism development that is compatible with the principles of sustainable development. It agrees to favour a coherent approach to projects within its own area and to take a long term view of the management of the area” (Europarc Federation 2007). In so doing, the Park will prioritise cooperation and the sharing of responsibilities in order to improve the effectiveness of its mission to protect the environment. The Charter requires that a strategy be prepared for the Park that will:

- Protect and enhance the natural and cultural heritage;
- Improve the quality of the tourism experience;
- Raise public awareness of the Park's special qualities;
- Develop tourism specific to the area;
- Support training programmes for staff and other target groups;
- Protect and support the quality of life for local residents;
- Increase benefits from tourism to the local economy; and
- Monitor and control visitor numbers.

These same principles are at the core of the guiding principles underpinning this Management Plan (see Chapter 6) and reinforce the statutory purposes and duty that are the foundation of the Park's designation. Pursuit of the Charter's principles in tandem with those of the Management Plan can only serve to benefit the National Park, its visitors and the people who reside here.



7.3.3. Fforest Fawr Geopark

Fforest Fawr Geopark was established in 2005 in the western part of the National Park. The Geopark's overarching purpose is to work at a landscape scale to safeguard and enhance geodiversity, biodiversity and related cultural heritage through local partnerships, enabling communities and businesses to understand its importance and take economic advantage of its special qualities in pursuit of sustainable development. The key to the Geopark's success is the engagement of local communities and local businesses. It is a member of the European Geoparks Network (EGN) and the UNESCO Global Network of National Geoparks (GGN). The Brecon Beacons National Park is unique in having within its borders, in Fforest Fawr and in Blaenavon's industrial landscape, the two UNESCO designations of Global Geopark and World Heritage Site.

Fforest Fawr Geopark is run by a Partnership Board involving key partners at a senior level working with a Management Group that coordinates and develops partner activity on the ground. The promotion and interpretation of the Geopark takes place within the context of it being 'a park within a park,' recognising the importance of each designation on a topic by topic basis in the west of the National Park. The success of the Geopark is ensured through efficient and effective partnership working and by interfacing with other parts of this Management Plan.

Currently (as of 2010) a new Geopark Action Plan is under development. The vision and objectives have been finalised and have been informed by the NPMP consultation process. NPMP consultation will continue to inform the decision making on the Geopark Action Plan.

Strategic Objectives: Fforest Fawr Geopark

1. Develop landscape-scale conservation of geodiversity, bio-diversity and related cultural heritage.

Conservation is a key priority for sustainable development. With the Geopark designation, there is the opportunity of applying landscape-scale programmes in concert with work being undertaken as part of other sections of this plan. Whilst geodiversity conservation is clearly important, it is not the exclusive priority; biodiversity and cultural conservation are equally parts of this programme.

2. Improve the visitor experience, particularly by developing information and interpretation of its special qualities.

A key to enabling sustainable development is providing opportunities for people to enjoy and benefit from the designation. In this way their experience of the area is deepened by understanding it in more detail. They are also more likely to return if they have had an enjoyable time. Public, private and voluntary sector organisations all have significant roles to play in improving the visitor experience. The private sector contributes, for instance, by offering opportunities to experience the landscape through outdoor activities, commercially run attractions or other activities. An emphasis on developing and utilising the area's sense of place is vital to this process.

3. Support sustainable tourism and other forms of sustainable economic development.

Tourism is the most obvious way in which a designation like Geopark can benefit the area. The work of the partnership should be focused on improving the public and private tourism infrastructure in concert with tourism development elsewhere in the National Park. Enhancing the sustainability of the tourism industry and the visitor experience is of critical importance again in



A guided walk on Cadair Mawr



Discovering the rocks of the Geopark

all sectors. In addition the Geopark will explore other ways in which sustainable economic development can be supported through its work.

4. Act as a focus for environmental/earth education and research.

Developing understanding, particularly amongst local people, of the Geopark and its special qualities by working with youth groups, schools, colleges and universities is important. Equally engaging young visitors is an important aspect of the Geopark's work. Lastly supporting and enabling scientific, particularly geological, research increases understanding of the processes that underpin the special qualities and enables both scientific and educational objectives to be met.

5. Engage local communities in new ways of working towards sustainable development.

Ultimately the Geopark designation and its sustainable development aims are focused on improving the long term viability of local communities. It is therefore important to involve local communities, their residents and businesses in the development of Geopark initiatives in their locality and to encourage them to undertake their own projects as part of the Geopark's development. Tourism is the most obvious way in which a designation like Geopark can benefit the area. The work of the partnership should be focused on improving the public and private tourism infrastructure in concert with tourism development elsewhere in the National Park. New ways of working will be explored and developed with communication being

seen as the key priority. Geopark development will be monitored to assess its impact on sustainable economic, environmental and social development.

6. Seek to include all sectors of society in developing the work of the Geopark.

The Geopark must not be seen as being the exclusive preserve of any sector of society whether in host local communities or visitors. Active steps will be taken to encourage minority groups to visit by ensuring their special needs are met.

7. Use the area's geological heritage to encourage partners, visitors, businesses and communities to address the challenges of climate change.

The story of geological development can inform humanity's understanding of current climate change issues. By incorporating this theme into Geopark development it is hoped that both understanding and awareness of local issues will be raised through a better understanding of global issues, leading to real world actions on behalf of all stakeholders.

CROSS-REFERENCE

- 7.2.1 Outdoor Access and Recreation
- 7.2.3 Information
- 7.2.4 Education
- 7.2.5 Interpretation
- 7.3.1 Sustainable Communities
- 7.3.2 Sustainable Tourism
- 7.3.4 Planning and Development

7.3.4. Planning and Development

Planning is the principal process for achieving sustainable development in the National Park. The BBNPA is the local planning authority (LPA) for the Park. It has the statutory functions of controlling development and producing a development plan for the Park. The BBNPA works with neighbouring LPAs to draw up strategic planning guidance. Owing to its location, it is represented on three of Wales' four sub-regional planning groups. The BBNPA is currently consulting on and will publish a new Local Development Plan (LDP) within the lifespan of this Management Plan.

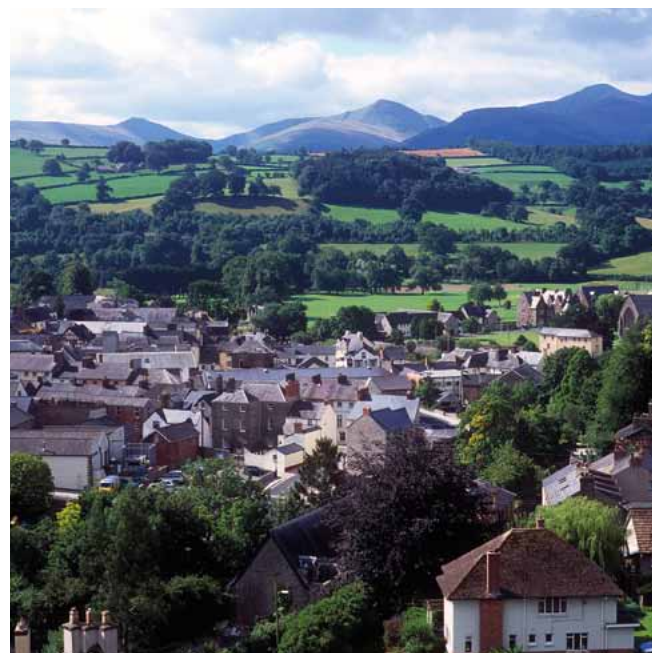
In fulfilling their planning roles, the BBNPA and other LPAs are subject to planning legislation, Government guidance and regulations. In most cases, these apply in the same way both inside and outside National Parks, for example in planning for residential development whilst protecting countryside for its own sake. In addition, Government planning guidance for Wales requires NPAs to give great weight to the conservation and enhancement of natural beauty within their Parks. It states that developments which are of more (UK) national rather than local significance will not be permitted in the National Park save in those exceptional circumstances where it can be demonstrated that overriding public need, and severe detriment to the local economy, outweigh the National Park designation.

The BBNPA uses its planning function to help achieve its wider aims and objectives. Planning is a means of integrating appropriate development with the landscape and existing settlements, integrating development with transport, allowing for recreational facilities and providing housing and employment for local people. It is a way to encourage sustainable living whilst providing public benefits now and with an eye to the future. The BBNPA sets standards and policies via the LDP to promote innovative solutions to complex societal issues, such as affordable housing, potential impacts associated with climate change or fossil fuel depletion. The LDP also addresses the interaction of many of these

issues through, for example, the appropriate siting of new development to reduce the risk of flooding and to mitigate the compound impacts that climate change will bring to these considerations (see also 7.1.8 Water Resources). Thus many of the objectives in this Management Plan involve an action to include relevant policies in the LDP. Land use and transport planning will be linked through the Regional Transport Plans.

Development in the Park must be sustainable. Its role as LPA gives the BBNPA many opportunities to apply the principles of sustainability to land use, local food production and small-scale energy initiatives, particularly in light of climatic uncertainty. Sustainability involves ensuring a better future for the planet's environment and people by conserving resources and involving local people in decision-making.

The BBNPA is developing its land allocations, policies and design guidance so as to save energy, and reduce waste, pollution and the need to travel. As it is formulated, the BBNPA will involve Park residents in both strategic and local aspects of the Local Development Plan.



Brecon and the Beacons beyond



Dardy near Crickhowell

Strategic Objectives: Planning and Development

1. Prepare an LDP which is responsive to drivers of change and enables development to meet identified needs.

The Authority is required to prepare an LDP which will guide all future development in the National Park over the next 15 years. The LDP will address the unique economic, environmental, and social characteristics, opportunities and issues of the Park area. It is based on the vision, objectives and priorities contained in this National Park Management Plan. The LDP will address the land use aspects of the NPMP. The BBNPA will prepare an LDP which is resilient and responsive to drivers of change (see Chapter 5) and which helps the Park's communities mitigate and adapt to the effects of climate change where possible.

2. Provide a first class planning service.

The BBNPA has statutory functions of controlling development and producing a development plan for the Park. The BBNPA's role as LPA gives it a high profile in the local community.

It therefore seeks to involve the public in the development of planning policy. The Planning Services Charter sets out how the BBNPA aims to make development control and all its planning services user-friendly. The planning system is complex, and the BBNPA has a role

in explaining it to community councils and others. In order to make its services first class, the BBNPA aims to improve consistency of decision making, increase public engagement in, understanding of and satisfaction with the BBNPA's planning service and improve relationships with partner organisations.

3. Ensure that there is sufficient land for market and affordable housing to meet the identified need.

The BBNPA has a statutory duty to provide for a level of housing in the Park appropriate to its designation whilst maintaining community vitality. The BBNPA is not a housing authority; this is the role of the Unitary Authorities. Nonetheless the BBNPA works closely with the relevant Housing Authorities in the preparation of the Local Housing Market Assessments and Local Housing Strategies. By way of the LDP, the BBNPA sets out policies for the provision of land for housing, including affordable housing. This provision not only requires the identification of appropriate sites for housing but also requires prioritising these in strategic planning as well as in funding programmes. There is expressed need for access to affordable housing across the Park's communities. Trends for the National Park indicate that this need is likely to be long term.

The BBNPA has been working with relevant stakeholders - including the Unitary Authorities and developers - to identify opportunities to deliver more affordable housing and will continue to do so as it formulates the Local Development Plan. The BBNPA and its partners will work to ensure that all new housing, including affordable housing, in the Park and on its boundaries is of high design and quality and responds to its local context.

4. Allocate sufficient land for the provision of a variety and mix of employment opportunities to encourage a better link between the provision of employment and housing.

In terms of securing the social and economic well-being of the Park's communities, appropriate and affordable housing provision is clearly a vital ingredient. Just as important to the sustainability and viability of local communities is the provision of employment opportunities that provide for the livelihood of the Park's residents. Although the BBNPA is not the lead economic development or community development agency, WAG encourage the BBNPA to foster partnerships that retain and promote local employment opportunities that are in keeping with rural development objectives. Consideration must therefore be given to the availability of appropriate land and investment in infrastructure and services that promote sustainable communities. The BBNPA and its partners will ensure the availability of land and investment in the Park is consistent with the special qualities of the area and avoids damage to important nature conservation sites and species.

5. Maintain and encourage the vitality and viability of the Park's communities and town centres.

The overriding principle behind the BBNPA's planning policies is that of sustainable development; development must be appropriate to the Park's statutory purposes and duty and its rural situation. Inherent in this principle are the concepts of sense of place, social inclusion, community health and well-being and local empowerment. From the standpoint of local communities, this means that the BBNPA and its partners should encourage development which contributes to the creation of sustainable places, promotes integrated communities, with opportunities for living, working and socialising for all and enables development that encourages a healthy and safe lifestyle and promotes well-being.

6. Improve the physical quality, energy efficiency, accessibility and sustainable design and construction of all development throughout the Park.

Building styles from different centuries are represented across the Park. These need to be conserved and appropriate elements reflected in the designs for new developments. Guidance for applicants is also needed on maximising the energy efficiency of their proposals, and reducing the materials used and waste produced. In keeping with the National Parks' commitments to sustainability and the climate change agenda, the NPAs have produced up-to-date guidance on sustainable building design and materials in the National Park. This Guidance for Sustainable Design in the National Parks of Wales (Spring 2009) is an exemplar in sustainable design locally and nationally.

7. Minimise light and noise pollution.

Despite its proximity to urban centres such as Cardiff, Bristol and Swansea, the Park boasts a dark night sky year round where, on clear nights, an abundance of stars can be seen. Similarly, its low population density and lack of major motorways limit light and noise pollution. These factors contribute significantly to the sense of tranquillity and remoteness so often cited as a key special quality of the Brecon Beacons National Park. The BBNPA and its partners will seek to maintain and enhance these attributes.

CROSS-REFERENCE

- 7.1.1 Landscape
- 7.1.4 Historic Environment
- 7.1.5 Built Environment
- 7.1.8 Water Resources
- 7.1.10 Minerals
- 7.1.11 Energy
- 7.3.1 Sustainable Communities
- 7.3.4 Transport
- 7.3.5 Waste

7.3.5. Transport

Transport is necessary for most journeys to and within the National Park, for both residents and visitors. The Park is particularly dependent on road transport for both people and goods. There are no railway stations within the Park's boundaries (although several serve its periphery), and the Monmouthshire and Brecon Canal is at present restricted to pleasure use. Cycling and horse riding are primarily recreational activities, and outside Brecon public transport is inadequate to serve most needs. Private vehicles are therefore essential to residents, visitors, businesses and agriculture in the Park.

Additionally, there are those both in and outside the Park whose mobility is limited by a lack of transport, and there is an unmet demand for access via public transport to destinations either side of the Park boundary. Promoting access for all to the Park and ensuring that residents have access to services and facilities are important objectives for the BBNPA.

Detailed information on traffic movements around the Park is difficult to obtain as there are many roads of various grades under the control of WAG and seven Unitary Authorities. The most accessible traffic data sets come from Scarborough Tourism Economic Activity Monitor (STEAM) and relates to tourist traffic. Between 2003 and 2004, the number of tourist cars on the road rose 4%. However, the amount of tourist traffic decreased between 2000 and 2004, with numbers not having reached those recorded prior to the Foot and Mouth Disease outbreak in 2001. This goes against the trend of an overall increase in vehicles on the roads in Wales for the same period, as reported in the Welsh Transport Statistics 2004. A special data collection exercise would be required to determine the trends in all traffic across the Park.

The impact of transporting people into and around the National Park contributes to the Park's ecological footprint. Alleviating this contribution was identified in the Sustainable



The A470 between Merthyr Tydfil and Brecon

Tourism Strategy as a high priority task. Equally it is probably one of the most difficult tasks to address in view of the dispersed nature of the centres of population/tourism attractions and the natural propensity of visitors to use car-based transport.

The BBNPA is very concerned with transport issues because of their effect on sustainability, the environment and communities, and their importance for residents and visitors. However, its influence is limited; the BBNPA is not the Highway Authority (HA) for the Park. The relevant powers and resources rest with the National Assembly and HAs, which must have regard to National Park purposes and *"ensure mutual cooperation across Park boundaries, particularly in planning and highway matters."* In accordance with the BBNPA Planning Obligations Strategy, the BBNPA will work in partnership with the constituent HAs to negotiate Section 106 monies where appropriate for necessary highways improvements.

Regional Transport Consortia (RTC) are required to set out their transport strategy in five-year Regional Transport Plans (RTPs), with the aim of providing an integrated transport system. There must be local targets for tackling pollution and congestion, more traffic management, road safety, public transport and alternative modes of transport. There will

be more certainty of funding for initiatives, wider public consultation and powers to charge for road use and parking. RTPs must also be consistent and integrated with the land use strategy contained in UDPs, the forthcoming LDPs and the Wales Transport Strategy. RTPs also must undergo extensive consultation with relevant stakeholders, including local communities, landowners, businesses, Government agencies and NGOs. The Park is covered by three such RTCs and their RTPs. It is important that the prescriptions of this Plan are incorporated into those of all three RTPs.

The Wales Spatial Plan encourages transport-related improvements be made in the Park to fully realise local socio-economic and commercial potential, particularly with respect to key settlements (Brecon, Talgarth and Hay-on-Wye). These interventions should be pursued as part of the Regional Transport Plan to ensure that their strategic status is not restricted by accessibility constraints, and ensure that strategic transport linkages both east-west north-south are maintained and enhanced. As with any development in the NP, any proposed developments or infrastructure must be in keeping with the Park's purposes and duty as well as the UDP and forthcoming LDP.

Furthering this, the County Surveyors' Society, National Park Officers' Group, Countryside Commission and CCW published a Joint Statement on Traffic and Transport Policy and Practice in National Parks (1996). It comprises a commitment to work together to deliver good design and sustainable traffic and transport systems which support National Park purposes, meet the needs of local communities and are fully integrated with land use and management strategies. The consultations on this Management Plan are part of this process, and a start has been made with the Beacons Bus Partnership and Visitor Transport Partnership. The BBNPA can only coordinate work in this regard - the primary burden for the delivery of sustainable transport will remain with the UAs and RTCs. It is essential (especially since so many administrative boundaries are crossed) that

public bodies work together toward common aims and that a joined up partnership approach is taken.

Strategic Objectives: Transport

1. Reduce the need for travel by controlling the location and design of development.

The BBNPA itself is not a HA but is responsible for strategic land use planning and for determining applications for highway works which require planning permission. Powys, the Highway Authority for the majority of the National Park area, works closely with the BBNPA and other highway authorities in the production of integrated transport and land-use strategies, particularly with the aim of assisting in the production of the National Park's Local Development Plan. The BBNPA also has an improved planning obligation strategy. This strategy enables the UAs to identify benefits that could be brought to local communities through a development (e.g., cycle route or transport plan). The BBNPA could, for example, allocate sufficient land to encourage community food production whilst Highway Authorities strategically link this land to places of residence via local transport routes. Given the role of quality data in monitoring progress, the BBNPA and Highway Authorities will work together to explore collection of appropriate data and trends across the Park. The BBNPA will be considering these and other factors as part of the development of the Park's Local Development Plan.

2. Provide an integrated transport system that encourages healthy and active lifestyles and supports local communities.

The need to travel should be reduced, and the attractiveness and range of public transport options increased, without adversely affecting the overall quality of people's lives. Better links between modes of

Case Study

public transport, recreational travel and access to the countryside would benefit tourists and residents alike. This work can only be achieved by partnership working between the BBNPA, UAs, RTCs and WAG.

3. Encourage the development of new and existing services aimed at the visitor market.

Partnership working, particularly between the BBNPA and UAs, will be necessary to develop and market services with the needs of visitors in mind to provide transport to those attractions and outdoor activity locations that would especially benefit. The Beacons Bus project will continue to grow in time and space with the aim of covering as much of the summer season as possible and increasing routes to meet demand. Similarly, best use should be made of existing weekday service networks by ensuring that journeys are made easier for visitors with high quality marketing, information and service provision, including excellent customer care from transport operators. Work would include a network of strategically placed transport gateways and interchanges where information for visitors is attractively presented and interchanges facilitated.

4. Facilitate sustainable, long distance transport to the National Park.

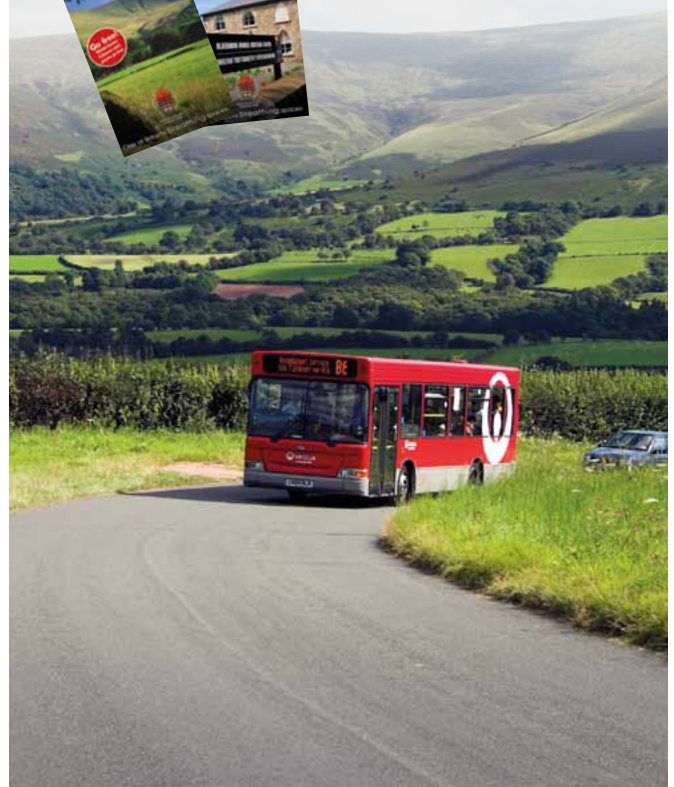
The National Park has a role in retaining holiday visits within the UK and avoiding the impact of air-based transport to destinations like the Mediterranean. This also improves the retention of finance in the country. However this in no way diminishes the need for action to be taken to encourage visitors to use non-car based transport for travelling to and within the area. The key to this process is integration with a need for rail/coach/bus interchanges to work efficiently for visitors. The Traws-Cambria bus service developed by the Assembly Government is a key component in the delivery of this integrated system. Partnership working is needed between WAG, UAs and

Beacons Bus Project

The primary involvement historically of the BBNPA with visitor transport has been the development of the Beacons Bus project. The summer Sunday and Bank Holiday network operates by bringing day visitors from across South Wales into and around the National Park. It has grown significantly since its inception in 1999 and now provides nearly 10,000 passenger journeys per year.

It is run by a partnership of the BBNPA together with 14 other public and voluntary bodies and is seen as being highly successful. It has achieved significant modal shift, delivers high quality social inclusion objectives and enables interpretive work to be undertaken with guides on the buses.

In addition, some work has been done to make it easier for those keen to do so, to use public transport. Actions have been to publish a guide to using public transport, an annual timetable of all services in the National Park and to incorporate public transport messages and information within appropriate publications and websites.



the BBNPA to enable maximum benefit to be drawn from this service. Work has also been done to link the National Park with the towns on the periphery, and integrate mechanised transport modes and walking and cycling routes extending from the Swansea Valley, through Ystradgynlais and across the National Park to Brecon. Further work is planned to create modal interchanges and support activities for walking, cycling and horse riding at towns on the periphery of the Brecon Beacons, and at a limited number of internal settlements where this would not detract from the character and beauty of the National Park. This will also provide economic benefits to local people.

5. Work with Transport Generators on Green Travel Plans.

Travel plans are intended to be a decisive mechanism in encouraging a shift to public transport and/or car sharing, walking and cycling for commuting and business journeys. Public and private sector attractions, festivals, tourism businesses and other organisations can minimise their impacts through the adoption of these Plans.

6. Support working practices and behaviour change initiatives that reduce the Park's greenhouse gas emissions and reduce people's dependency on fossil fuels for transport.

In addition to Green Travel Plans, the BBNPA and Unitary Authority partners recognise that change needs to be made in the extent, quality and modes of operation of public transport services and in the availability and quality of public transport information. Powys County Council is working with the BBNPA and partner authorities in TraCC to achieve these aims and to minimise the consumption of fossil fuels. This strategic objective will also require an investment in raising people's awareness about climate change concerns and about the declining production of fossil fuels, particularly petroleum.

7. Develop Sustainable Travel Marketing.

Whatever mechanisms are adopted, it is essential that they are attractively and consistently marketed to the visiting public with a view to educating and persuading use of non-polluting modes of transport.

CROSS-REFERENCE

- 7.1.7 Air Resources
- 7.1.11 Energy
- 7.2.3 Information
- 7.2.4 Education
- 7.3.1 Sustainable Communities
- 7.3.2 Sustainable Tourism
- 7.3.4 Planning and Development
- 7.3.6 Waste Management

7.3.6. Waste Management

Wales has an estimated five years of landfill space available based on current estimates.⁴¹ The amount of waste generated in Wales continues to increase, straining an already limited resource. The good news is that the rate of waste generation across Wales has begun to slow whilst the percentage of waste recycled or composted has increased significantly. Powys, which has the largest proportion of land inside the National Park, recycles 37% of its waste - more than any other UA in Wales.⁴² Several of the Park's other UAs are also recycling more than the national average. These efforts have slipped recently because of lack of financial support. Nonetheless it should be a priority to make recycling more the norm than it currently is by a public awareness campaign and increased facilities.

Although WAG does not condone the allocation of landfills, incinerators, or other waste disposal sites in the Welsh National Parks, the Park's residents and visitors still produce

41. Environment Agency Wales. 2004. Waste Data Update.

42. Welsh Assembly Government. 2007. Key Environmental Statistics for Wales.



Recycling in Brecon

waste which must be dealt with outside Park boundaries. As this approach is unsustainable, the residents and visitors have a responsibility to reduce the regional waste load, reusing and recycling materials where possible. The BBNPA and its partners in their efforts to achieve sustainability, therefore, share the responsibility of waste management.

The BBNPA's role in waste issues takes two forms: in its role as LPA, and in the promotion of sustainable waste management ideology throughout the Park (i.e., the reduction of waste generation across the Park and the promotion of reuse and recycling). Both of these roles require close liaison with the UAs, which are responsible for waste collection, and the EAW, which regulates waste disposal. As such the BBNPA will be required to address waste management in developing the LDP.

Strategic Objectives: Waste Management

1. Promote the waste hierarchy of reduce, reuse and recycle across all sectors of the National Park.

The BBNPA and its partners should seek to minimize the production of waste and seek to contribute to sustainable waste solutions. Plans and strategies should contribute to the South West and South East Wales Regional Waste Plans. The BBNPA in particular can play a key role in public outreach, through education, interpretation, information and by serving as an exemplar for sustainable waste management through its own practices.

2. Minimise the amount of waste generated in the National Park.

The Regional Waste Plans are underpinned by the principles of sustainability, the waste hierarchy, proximity and regional self-sufficiency. Coupled with the limitations on waste disposal methods within the Park, these principles indicate that the communities within and the visitors to the National Park have an obligation to minimise their contributions to the regional waste stream. Exploration of innovative or alternative options supportive of the Park's purposes and duty and in agreement with the Regional Strategies can be encouraged by the UAs and the BBNPA.

CROSS-REFERENCE

- 7.3.1 Sustainable Communities
- 7.3.4 Planning and Development
- 7.3.7 Military Use of the Park
- 7.3.5 Transport

7.3.7. Military Use of the Park

The Brecon Beacons National Park has a long and rich history of military connections. The military uses the National Park's open spaces for training and adventurous pursuits. Some of these activities have an adverse impact on the Park and the lives of those who live in or visit it. The BBNPA and its partners continue to work very closely with the MOD to fulfil the Park's purposes and duty whilst conserving its special qualities.

The MOD currently owns about 114 hectares of land in the National Park. This includes the camp at Sennybridge, base for the training area in the north of the Park; Dering Lines training camp, the Barracks, the sports fields and Headquarters 160 (Wales) Brigade - all based in Brecon. The military own and maintain Powys Army Cadet Force Training Centre at Cwrt y Gollen. There is also a small outdoor pursuits' centre in the Park that is owned by the Royal Navy.

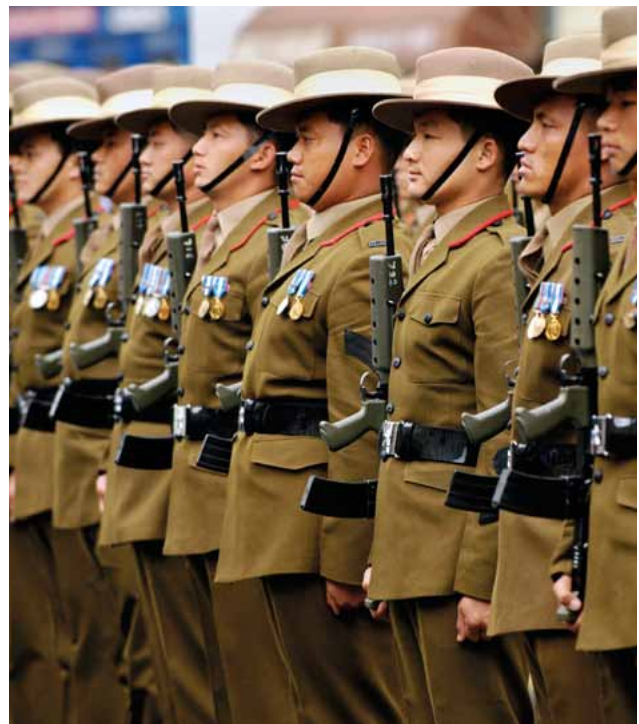
Military training takes place on the MOD's own bases, and there is considerable movement of vehicles to and from Brecon and Sennybridge. Jets and Hercules aircraft use the Park's airspace for low flying training, and helicopters are used both for moving personnel and training purposes. Services personnel use the National Park's mountainous terrain and rights of way for military and tactical training which is conducted in uniform with packs and weapons. The National Park is also used for adventurous pursuits such as hill walking, rock climbing, canoeing, caving and hang-gliding.

The military presence in the National Park is part of the area's cultural heritage and economy. The Brecon Barracks was the home of the South Wales Borderers Regiment, and a popular museum that is open to the public is sited near the town centre.

The MOD's various establishments offer employment to local civilians and use local services, an important contribution to the Welsh economy. The permanent staff and their families - including a Gurkha company - add



'Beating the Retreat'



The Gurkha company based in Brecon

cultural diversity to Brecon. They are considered an integral part of the community. The National Park benefits from the assistance and support of military units training in the Park. Throughout the year these training units provide essential support through skills, manpower and vital ground work to help complete important conservation projects like bridge

Case Study

Army Man-power Helps Rebuild National Park

The Soldier Development Wing, which is based at Sennybridge Training Camp, provides developmental training for over 6,000 recruits throughout the year that are in week 10 of their basic training. During the week they are exposed to local caves, climbing and kayaking/canoeing venues along with physical training in the Brecon Beacons mountain ranges. The National Park area provides the Wing with an excellent array of opportunities to conduct vital training imperative to the recruits' development.

In addition to their training requirements, the soldiers are committed to assisting with conservation improvements and improving their community relations and service. At a time when many organisations face increased resource demands, this support is essential to the ongoing management of the National Park. In turn, these efforts assist soldiers by providing them with a tremendous variety of work and skill development which may be very useful when they are posted abroad.

As part of their continued commitment, the Soldier Development Wing approached BBNPA in 2008 with the offer of extra man-power resources to help contribute to conservation projects including bridge building, footpath repair, stone removal, vegetation clearance and common land beautification. In December, more than 500 soldiers, along with National Park wardens, rolled their sleeves up and braved freezing conditions in the Brecon Beacons enabling vital ground work to be completed on important conservation projects.

The Army's efforts have provided tremendous support to the Brecon Beacons, with over 6,500 man hours dedicated to improvements at some key sites in the National Park - including the Waterfall Country, the Llanthony Valley, Trefil Quarry and common land. Volunteers are needed year-round in the BBNP, and the invaluable contribution of the Army has set the scene for further partnership projects in the future.



building, footpath repair, stone removal, vegetation clearance and common land beautification. The BBNPA maintains regular liaison with Defence Estates, the land managing arm of the MOD, and with HQ 160 (Wales) Brigade for the control of units using common land for training. As a public body, the MOD must under the 1995 Environment Act take account of National Park purposes and duty in carrying out its activities.

Strategic Objectives: Military Use of the Park

1. Reduce adverse effects on the Park's landscape, biodiversity and historic interest and on others' enjoyment caused by military exercises and adventurous training.

One of the Park's special qualities is peace and tranquillity, which can be affected by the noise from occasional low flying training aircraft and helicopters. The concern generated by this issue varies with training schedules, but it is not open to influence by the BBNPA, the Unitary Authorities or concerned local organisations. Nevertheless, there are a number of opportunities through which influence can be brought to bear, ranging from the strategic level (e.g., national reviews and consultations by Defence Estates) to the local level (e.g., dialogue with the MOD or Defence Estates on applications relating to new, renewed or intensified use of land in the National Park).

2. Educate service users on responsible, sustainable and appropriate use of the Park.

The military use of the Park for exercises and adventurous training has effects similar to those caused by organised outdoor pursuits groups. If poorly managed or overdone, these can include traffic on narrow lanes, disturbance to stock, erosion of paths, litter and inconvenience to farmers through occasional damage to walls and fences.

An additional factor is the effect on enjoyment for some of the sight of armed troops in uniform. Where relevant, adventurous events will be covered by the BBNPA's developing policy on sporting and challenge events.

3. Maximise the benefits of military activity in and around the Park.

The BBNPA and MOD continue to maintain a mutually beneficial and accommodating relationship. Exercise Dipper and the Soldier Development Wing training gives visiting units and personnel an opportunity to contribute to the Park's environmental conservation and provides ongoing support to its communities and resource constraints. The BBNPA seeks to maintain this excellent working relationship.

4. Manage MOD's rural land in and affecting the Park to support Park purposes.

The MOD strategy takes appropriate account of stakeholders' concerns, consulting with them on detailed codes of practice relating to its management objectives and implementation activities. The MOD owns little rural land in the Park, but any changes to the use of the Sennybridge Ranges might be significant. The MOD now needs planning permission to carry out development on Crown land. The BBNPA will apply the same design criteria as elsewhere in making comments, and the National Assembly for Wales will arbitrate in any dispute.

CROSS-REFERENCE

- 7.1.1 Landscape
- 7.1.14 Uplands
- 7.2.1 Outdoor Access and Recreation
- 7.3.1 Sustainable Communities
- 7.3.4 Planning and Development



Sennybridge