

6.0 FORCES FOR CHANGE

6.1 Introduction

6.1.1 The landscape of the Brecon Beacons National Park is not static, and many processes of change continue to impact upon it. This section summarises the key forces for change acting on the landscapes of the National Park as a whole. For more detail on all these topics please refer to the *National Park Management Plan 2010-2015*. The Landscape Character Area (LCA) profiles in Section 7.0 describe the specific forces for change acting on individual LCAs. Although the key forces for change are described under separate headings below, they are closely interrelated.



Fig. 10: Challenges facing the National Park and its communities (reproduced from *National Park Management Plan* p. 51)

6.2 Climate Change

6.2.1 Climatic conditions have always fluctuated, and will continue to do so in the future. Exactly how the climate will change in the future cannot be predicted with certainty but it will have a variety of implications on all areas, including the Brecon Beacons National Park and its landscapes. Possible effects include changes in habitats, with some becoming lost or altered, thereby causing some species of plants and animals that are unable to adapt to become locally extinct. Examples of habitats potentially affected include woodlands, uplands and wetlands, all of which are key components in the landscapes of the Brecon Beacons. Changes in environmental conditions will also affect farming, particularly in terms of crop suitability, growing seasons, availability of drinking water and shade, and effects on livestock breeding. These agricultural changes will affect the character and appearance of the landscape, particularly where they depart from traditional hillfarming practices. Further landscape changes could occur as a result of increased intensity of storm events causing loss and damage to trees, particularly those on shallow soils which are less well rooted. Increased rainfall during winter would affect river flows and groundwater conditions, which could exacerbate flooding and change the character and biodiversity of lower-lying areas.

6.3 Biodiversity

- 6.3.1 Biodiversity describes the variety of species, habitats and individual variation which is essential for life on earth. The landscape we see today is a product of humanity's influence on biodiversity over thousands of years. Its habitats and species have been affected by management of the land to produce food, water, fuel, timber, minerals and places to live. People therefore do not live in a natural environment but a semi-natural one; *a place where naturally occurring habitats and species still exist but their form and location is dependent on where human activities have allowed or encouraged them to be*¹.
- 6.3.2 Land management resulted in a rich biodiversity inextricably linked with the character and appearance of the Brecon Beacons landscape, for example its grazed upland moorlands, woodlands and hay meadows. However, the farming and forestry practices which created this biodiversity are changing, and traditional farming has been revolutionised by mechanisation, artificial fertilizers, land drainage, pesticide use and intensification of single crop or livestock production. These agricultural methods have increased production but to the detriment of habitats and species. For example, improvement of grassland for grazing (through drainage and fertilizer use) has reduced the number of wild flowers present in meadows. Traditional management of woodland (for example through coppicing) has also declined, resulting in a loss of woodland diversity in terms of age and species. A general decline in mixed livestock grazing (by cattle, sheep and ponies) in favour of sheep has led to replacement of heather moorland with monospecies grass swards and an increase in bracken. Bracken has also increased as a result of as a consequence of farmers switching from lamb to mutton production, and poor heather/ grass burning practice. As well as reducing upland biodiversity, these changes also affect landscape character through changes in the appearance, texture and colour in the moorlands which form the backdrop to much of the National Park.
- 6.3.3 Biodiversity has also been lost as a result of development pressure: land which once contained semi-natural habitats is now taken up by housing, roads, industry and infrastructure, and this is also affecting the character of the landscape in some parts of the National Park. Further landscape change may also occur as a result of Glastir woodland planting schemes.
- 6.3.4 The Brecon Beacons National Park also has a rich subterranean environment in the form of cave systems which support their own biodiversity as well as preserving an historical record of past environmental conditions. These cave systems are affected by surface changes such as variations in groundwater flows and pollution of water supplies. Changes in surface land management, including agriculture and forestry, also have implications on the underground environment.

6.4 Farming Pressures

- 6.4.1 The landscape of the Brecon Beacons is the product of thousands of years of pastoralism: both enclosed lowland pastures and wide-open upland commons. The well-being of the farming community is therefore fundamental to the future of the landscape and communities of the National Park. At present, the livelihood of the farming community is under pressure from a number of challenges. Perhaps the greatest of these is the decline in the number of small family

¹ National Park Management Plan 20120-2015, p. 44

farms. The average age of farmers is increasing, and children may be reluctant to take on the demands of a family farm. This is a particular problem in the areas of most marginal agricultural land where farm viability is a particular issue. As traditional hillfarming declines, vital skills and traditions are lost, and these can have major impacts on the landscape and biodiversity. For example, decline in common grazing may lead to ‘scrubbing up’ of hillsides with invasive species such as gorse and bracken which out-compete the traditional grass and heather moorland as these areas succeed towards secondary woodland on the slopes within the tree line. Changes in stocking patterns (for example reduction in grazing by cattle and ponies) can also have impacts on moorland vegetation patterns.

- 6.4.2 Some farms are bought up by neighbouring farmers, resulting in fewer, larger farms, but with greater infrastructure requirements and larger buildings. Others are farmed ‘part time’ with simpler farming systems. Other challenges facing farmers come from reform of the Common Agricultural Policy (CAP) and its associated agri-environment funding schemes (for example the recently-introduced Welsh Glastir Scheme). The CAP has a very strong influence on farming policy and hence on the character of the farmed landscape. The viability of farming (and rural living in general) is also affected by increases in fossil fuel prices- the costs of fuel for travel, machinery and heating continue to rise, as do the costs of oil-based products such as plastics, pesticides and veterinary pharmaceuticals. Markets continue to change, with increased pressure (particularly from some supermarkets) to keep prices low. The challenge within the National Park is to ensure that the special qualities of the landscape continue to evolve through maintenance of viable farming communities. Some schemes such as the promotion of ‘Brecknock Lamb’ are helping in this process.

6.5 Local Population Pressures

- 6.5.1 It is predicted that the population of the National Park will increase over the foreseeable future. This will be a result of in-migration to the area, as its farming population is likely to continue to decline. The area is a popular retirement destination, and improved transport links have made parts of the National Park a commuter base. These population increases have resulted in an increase in house prices and housing demand, which is a particular problem for local young people who wish to stay in the area. Increasing the size of settlements to accommodate the increased population has impacts on the landscape of the National Park, potentially creating a more developed character. The Local Development Plan contains allocations of land for housing and other developments. Increasing the size of settlements to accommodate the increased population has impacts on the landscape of the National Park, potentially creating a more developed character.



Peat Erosion, Twmpa, Black Mountains.



Eco-friendly housing, Crickhowell



Upland car park, Storey Arms

6.6 Renewable and Non-Renewable Energy

6.6.1 The global depletion of fossil fuel supplies will have implications for the Brecon Beacons National Park's landscapes. For example, within the National Park small-scale renewable energy schemes such as solar-thermal, hydro-electric, wood-fuel, heat pumps and wind may alter the character of the landscapes and built form, particularly where there are issues of cumulative impact. Growing of biofuel crops may be a possibility in some parts of the National Park, but care must be taken not to adversely impact on the landscape. Larger renewable energy schemes outside the National Park such as wind turbines and solar farms may also affect views from within the National Park. Reduced availability of fossil fuels also increases the viability of large-scale coal mining outside the National Park, with consequent impacts on views from within the National Park.

6.7 Transport

6.7.1 Transport infrastructure is important to the local economy and the recreational use of the National Park. However, public transport provision is a challenge, particularly in the western part of the National Park where the communities are more scattered, and many of the National Park's residents and visitors are dependent on private vehicles. Improvements to road networks (including signage) and increase in traffic levels affect the character of the landscape. This is a particular issue where roads cross the upland parts of the National Park, and reduce their sense of tranquillity.

6.7.2 The National Park is aiming to cut its 'carbon footprint' by reducing the number and length of car journeys, and to develop more sustainable forms of transport including bus and cycling networks. These would potentially enhance the recreational resources of the National Park and enable visitors to enjoy the landscape in a more sustainable way.

6.8 Globalization

6.8.1 The loss of local distinctiveness in cultures, traditions, economies and biodiversity is a global phenomenon, and impacts on the Brecon Beacons where loss of local skills and 'know-how' is a particular problem. The most obvious examples of this in the Brecon Beacons are the decline of traditional knowledge and rural skills such as shepherding, dry stone wall construction and hedge laying. All of these losses lead to a gradual reduction in local distinctiveness and decline in landscape character.

6.9 Management Policies

6.9.1 The *National Park Management Plan 2010-2015* sets out the Guiding Principles and Strategic Objectives which inform the management of the National Park as a whole. The management guidelines at the end of each Landscape Character Area profile (Section 7.0) should be read in conjunction with the Guiding Principles and Strategic Objectives in the *National Park Management Plan*.