

## 5. QUALITY OF LIFE CAPITAL ASSESSMENT

### *Methodology*

- 5.1 Previously developed by the Countryside Agency under the name of Environmental Capital Assessment, the Quality of Life Capital approach is being promoted jointly by the Countryside Agency, English Heritage, English Nature and the Environment Agency as a means of providing a systematic way to identify what matters within the environment and how to manage it. The approach may also be applied to economic and social factors and as means of creating integrated thinking between these factors and the environment. In the case of this study the purpose of using the QoL approach is to identify factors which provide environmental benefits and disbenefits within the landscape of the Yorkshire Dales National Park, and to identify broad management objectives for the future.
- 5.2 The relationship of QoL to the landscape characterisation process is clear; characterisation *describes* the landscape whereas QoL *evaluates* and derives *aims* for the landscape. Within this study QoL has been applied to the distinctive range of elements which go together to form the landscape (eg drystone walls and barns, limestone outcrops), area-wide benefits which the landscape may provide (eg peace and solitude, dark skies) and detractors (eg quarries) which may have an adverse effect of landscape character.
- 5.3 QoL guidance has been obtained from the website Quality of Life Capital ([www.qualityoflifecapital.org.uk](http://www.qualityoflifecapital.org.uk)).
- 5.4 QoL guidance indicates that both expert and community views need to be reflected in the evaluation process. Time constraints have not allowed community consultation to inform this study but discussion with a group of National Park officers has enabled local experience to be reflected in the assessment process.
- 5.5 In agreement with the Yorkshire Dales National Park Authority, the consultants have applied the QoL approach to this study in three steps, as described below and set out in Tables 5, 6, 7 and 8:

**Step 1:** identify the range of landscape elements and features within the Park and why they matter, for example limestone pavements contribute to a range of attributes (representative feature, landscape pattern, educational/scientific resource etc). The range of elements identified in this part of the process was gathered as part of the fieldwork undertaken for landscape character assessment. Please refer to Table 5.

**Step 2:** assesses each of the elements and features identified in Table 5 against a series of criteria:

- a) the relative scale (national, regional or local) of benefit or disbenefit provided by the feature, (limestone pavement for example provides a benefit at international and national level).
- b) the effect of recent trends on the feature (eg is it declining, stable or increasing);
- c) possible future trends and forces which may affect the feature (positive trends such as agri-environment schemes or negative trends such as climate change);
- d) whether the feature is substitutable (eg limestone pavement is not substitutable whereas a quarried roadside exposure may be);
- e) priority (or importance) of the feature in relation to the landscape character of the Yorkshire Dales;

Each feature is then given a management prescription (conserve, restore or enhance, as defined below) to act as a guide for both existing and future environmental management initiatives within the Park and act as a framework from which future landscape guidelines may be developed:

- **Conserve** – protect features of distinctive landscape, ecological, geological or historic value from development or other forms of activity which would diminish the value of the feature;
- **Restore** – reinstate features which may have been lost or damaged due to decline or neglect (eg dry stone walls and barns);
- **Enhance** – take positive action to ameliorate the effects of development (eg enhancement of settlement edges) or to increase the amount of a desirable feature (eg rights of way, woodlands).

Please refer to Table 6 for the results of this process.

For ease of reference Table 6 is divided into those landscape features which provide benefits (eg limestone pavements, flower-rich meadows) and those which act as detractors in the landscape (eg quarries, wire fences).

The scale of benefit (or disbenefit) provided by a feature and its priority have been derived from a combination of existing designations (eg SSSI, SAC) together with professional judgement by the consultants and officer comment.

The range of forces which have driven past change and which may drive future change in the landscape has been identified by the consultants from desktop study of National Park, Countryside Agency, FRCA, MAFF and adjoining planning authority documents, together with personal observation and experience of National Park officers. These forces are described in detail in the following section of the QoL assessment and are then crystallised and applied within the subsequent QoL assessment tables.

**Step 3:** identifies the relative (minor, moderate, major) contribution made by landscape elements and features (both benefits and detractors) to landscape character on a dale by dale basis, as set out in Table 7. The same process is applied to the uplands within Table 8, reflecting the different range of benefits and detractors found there compared to the dales. This approach is intended to provide a close link with the landscape character assessment process, enabling both the essence of which features are important in a dale to be rapidly disseminated and creating a hierarchy which allows resources to be directed first to areas where their application may be of most benefit to future landscape character. For example, monies for barn and wall restoration might first be applied to dales where these features are of most importance to landscape character and, if these areas are satisfactorily dealt with, to subsequent dales where they are important but less distinctive features in terms of overall landscape character.

***Change in the Landscape***

- 5.6 The landscape of the Yorkshire Dales National Park has evolved from the combination of many centuries of man's use of the land and the inherent geological, topographical and hydrological characteristics of the area. The landscape continues to evolve in response to forces for change, which may be imposed by land use practice and wider economic, global and demographic factors. As a whole, given its distinctive landscape character, important habitats, geological features, archaeological sites and National Park status, the Yorkshire Dales landscape is considered to be very sensitive to change.
- 5.7 The Yorkshire Dales, by virtue of its National Park status, tends to avoid major built-development pressures that occur in other parts of the country including large-scale industrial/retail development, roads, transmission lines, significant settlement expansion and major new mineral extraction proposals. The park is not immune, however, to global changes or to the consequences of national demographic, economic and lifestyle changes. The main forces driving change in the landscape character of the National Park have been, and are likely to remain, developments in agricultural practice and the effect of numerous small-scale, minor developments. The latter can add up to important cumulative effects, which can considerably weaken and detract from the character of the wider landscape.
- 5.8 Key forces for change which have had an historic influence on the Yorkshire Dales landscape we see today and predicted pressures for change, primarily arising from economic and policy issues, and which may shape the future landscape of the National Park, are discussed below.
- 5.9 Forces for change were identified by the consultants from desk-top study of a range of National Park, Countryside Agency and other documents. The issues identified from desk study were then discussed and refined at a meeting with staff from the Park Authority on 5 July 2001.
- 5.10 Potential landscape change is considered under the following headings:
- Agricultural Practice
  - Return to a More Natural Landscape
  - Trees, Woodland and Commercial Forestry
  - Recreation and Tourism
  - Settlement Change and Expansion
  - Communications, Power Generation and Distribution
  - Roads and Traffic
  - Quarries
  - External Influences
  - Aerial Pollution and Climate Change
  - Geological and Archaeological Features
  - Public Opinion

- 5.11 Potential drivers of change identified in this section are considered later in the Quality of Life assessment at, where the relationship between potential pressures and the effect they may have on landscape elements (eg drystone walls, flower rich meadows) is explored further.
- 5.12 The tables below summarise the key landscape character changes which have recently occurred within the National Park and forces which may lead to future change:

***Result of Past Forces for Change on Landscape Elements***

- 5.13 Past forces for change have led to impacts on landscape character described below. The effect of these changes is not uniformly spread through the National Park. Impact may be clearly noticeable in some locations (eg coniferous plantation at Langstrothdale Chase) or may result in a general erosion of landscape character (eg gradual loss of barns, drystone walls and woodlands).

1. Disrepair or loss of drystone walls and barns
2. Loss of hedgerows
3. Increase in fencing
4. Loss of rough pasture to improved pasture
5. Loss of hay meadows to improved meadow
6. Decline in species rich grasslands
7. Decline in calcareous grasslands
8. Decline in wetlands / wet grasslands and drainage of upland areas
9. Removal of limestone pavement for rocky stone
10. Construction of new larger farm buildings
11. Inappropriate conversion or dereliction of farm buildings
12. Farm diversification projects
13. Highway improvements
14. Tourism impacts
15. Suburbanisation
16. Loss and decline of broadleaved woodland
17. Coniferous plantation
18. Historic impact of past mineral workings

***Current Trends/ Future Pressures***

- 5.14 The impact of the above changes, most notably those relating to changes in agricultural practice and habitat loss has led to the development of a raft of schemes within the National Park aimed at addressing agri-environment issues, habitat protection and diversity and woodland management. Whilst beneficial, these schemes in themselves promote changes which are likely to have a

noticeable effect on future landscape character within the National Park. The cumulative effect of numerous small development changes, primarily related to suburbanisation, is expected to continue. Wider issues relating to the future of agriculture, how the landscape is managed and global environmental problems are also identified as being potential forces for change.

1. Decline of traditional farming practices may be halted/reversed by agri-environment schemes
2. Review of government policy in favour of increased subsidy/ support away from production targets towards environmental protection and support for the rural economy
3. Reform of CAP
4. Consumer demand and changing preferences eg for specialist foods/organic foods/ farmers markets
5. Farm diversification /conversion of traditional buildings/ requirements for new buildings for rural business/recreation/tourism.
6. Foot and Mouth disease
7. Biodiversity Action Plan for habitat improvement and reinstatement (eg reversal of upland drainage)
8. Woodland strategy will result in an increase in woodland cover across the National Park
9. Reversal of some areas to a 'non-managed' or wilder landscape
10. Public opinion and expectations for retention of 'traditional' dales character
11. Tourism impacts, through increased visitor numbers and provision of tourist facilities
12. Highway improvements
13. Climate change and airborne pollution
14. Suburbanisation
15. Loss and decline of broadleaved woodland
16. Increasing need for renewable energy forms
17. Continued demand for aggregates regionally/nationally (mostly for road building)

#### ***Agricultural Practice***

- 5.15 The landscape of the Yorkshire Dales National Park is primarily pastoral in character, relying on grazing or hay production for management of both the traditional meadows within the dales and the open moor tops. In turn, key features of the landscape which are allied to livestock management, such as drystone walls, barns and farmsteads are also potentially sensitive to changes in agricultural practice.

- 5.16 Until recently, national agricultural policy has been aimed at maximising food production. The adverse impact of this approach on some of the most precious landscapes including the Yorkshire Dales was recognized in the 1980's resulting in the introduction of the Pennine Dales Environmentally Sensitive Area (ESA) scheme in 1987 which was subsequently expanded in 1992 and again in 1997. The ESA scheme encourages farmers to manage land in a way which protects its landscape, ecological and historic interest, in return for an annual payment. Within the National Park the certain dales or parts of dales areas are included within the ESA scheme. Moorland areas, however, are excluded from the scheme, with farmers continuing to receive subsidy and price support under the Less Favoured Areas scheme.
- 5.17 Further initiatives including Countryside Stewardship, English Nature's Wildlife Enhancement Scheme, the Farm Conservation Scheme, the Barns and Walls Conservation Scheme also seek to redress the balance between agricultural production and environmental interests.
- 5.18 Key landscape pressures resulting from the shift away from traditional agricultural practice include:

*1. Agricultural change from rough pasture/hay meadows to improved meadow and pasture (silage production rather than hay) particularly within lower dale slopes.*

Traditionally, in-bye (walled) land within the lower slopes of the dales is cut for hay, with grazing in spring and autumn. In-bye land within the upper dale slopes is predominantly used as pasture for grazing throughout the year, with occasional meadows. The resulting herb-rich vegetation of these meadows and pastures is a key component of the National Park landscape, bringing seasonally changing colours and textures and a diverse, rich pastoral character to the dales. Modern farming practice has moved towards intensification of grassland management, including land drainage, re-seeding and fertiliser application, which increases productivity (for silage and increased stock numbers) but reduces herb species, with a resultant impact on ecological diversity and landscape character of the dales. (ref 4) The resultant decline in hay production and its replacement with round bale silage can have a significant effect on landscape character. Furthermore, an increase in stocking rates and a shift in the balance of sheep to cattle (a 60% increase in sheep numbers and corresponding decrease in cattle numbers) has led to adverse changes in the species composition of many grassland habitats, particularly in limestone areas of the National Park. Levelling of pastures and destruction of historic features and topography may also occur as a result of intensification.

*2. Disrepair/loss of drystone walls and barns (through changed grazing practice and housing herds closer to farmstead).*

Where extensive grazing or 'ranching' is practiced, the need for small fields is obviated. The resulting lack of necessity to separate fields may lead to drystone walls becoming redundant and falling into disrepair. The Countryside Commission (ref 1) identified that within the Yorkshire Dales National Park, from the 1970's to late 1980's, some 20.3km of drystone walls and 10.3km of hedgerows were lost, compared to a gain of 88km in fencing. Expressed as % changes compared to the overall lengths of field boundaries within the National Park this reflects a 2.0% loss of drystone walls, 1.0% loss of hedgerows and a 21.8% gain in fences (including woodland enclosures). Drystone walls and hedgerows may be expensive to repair and are sometimes replaced with timber or wire fencing causing further erosion of landscape character. 'Ranching' also results in sub-division of the open moor tops with wire fencing to separate flocks or, increasingly, to exclude grazing in order to encourage heather regeneration.

Similarly, isolated field barns and cattle byres, historically used for housing cattle through the winter and storing hay in the loft, are often no longer required as modern farming systems have moved towards silage making and housing larger herds close to the farmstead (ref 4). Barns may fall into dereliction and be stripped of their flag roofs, leading to significant change in the landscape.

Some drystone walls are being dismantled and sold for building stone, particularly outside agri-environmental or rural conservation areas.

*3. Introduction of unsympathetic new farm buildings, to meet modern farming needs or inappropriate conversion or dereliction of redundant buildings.*

Traditional agricultural buildings and farmhouses make a major contribution to landscape character within the National Park. Allied to the intensification of farming practice is the potential for introduction of unsympathetic new agricultural development (eg large sheds to over winter stock and slurry tanks) which might provide important agricultural benefits but may be out of scale with traditional buildings, may detract visually from traditional farmstead groups or may be constructed from unsuitable modern materials. Similarly, vernacular buildings may be neglected when they are no longer suited for modern farming purposes. Pressure may arise to convert redundant agricultural buildings for employment, residential or holiday use, providing an alternative source of farm income but sometimes resulting in loss of traditional character. These factors may combine to weaken the distinctive vernacular architecture of buildings within the Dales which, in turn, may weaken wider landscape character. Loss of farm buildings within villages may also change settlement character.

5.19 The importance of agriculture in shaping the future character of the landscape is recognised by the Countryside Agency in their publication 'Tomorrows Countryside – 2020 Vision'. The impact of issues such as global markets, concerns over food safety, consumer demands and new technology on our current farming system is also recognised, leading to a predicted need for new approaches and priorities if a sustainable agricultural industry, which conserves the character of the countryside, is to be maintained. The critical link between agriculture and the environment is further considered in the Countryside Agency Research Note 'Integrating the Environment into the CAP' (ref 14), which promotes the redesign of the of subsidy system to enable greater integration between agriculture and environmental management and redirection of payments to support sustainable farming systems. Reform of the Common Agricultural Policy, in the form of reductions in production subsidies, in response to the requirements of global trade agreements, and changes in the support of sustainable farming, is predicted as a key issue in the 21<sup>st</sup> century. Given the close relationship between livestock farming and landscape character in both dale and upland areas these issues are likely to have significant long term implications for the National Park.

5.20 Potential future agricultural issues can be summarised as follows:

- An increasing awareness amongst farmers of the need to respect the environment, supported by appropriate financial incentives from the Government or EU, with an increasing emphasis on switching subsidies from production to payments for environmental benefits and support for the rural economy;
- Opportunities to respond to consumer demands, such as organic farming, which may support landscape and biodiversity aims;
- Potential to encourage markets in farm products from particular landscapes (as promoted by the Countryside Agency's 'Eat the View' initiative), which may then strengthen the rationale for maintaining

distinctiveness of those landscapes, and promotion of farmers markets, to close the gap between farmer and consumer (ref 5).

- 5.21 The current foot and mouth epidemic may lead to specific immediate effects such as loss of internal barn structures, or demolition and burning/reseeding of fields close to the farm. Longer term effects may include changes to stocking rates, land tenure and farm diversification, some of which will be positive and some negative.

#### ***Upland Management Pressures***

- 5.22 Well-managed moorland areas form a complex mosaic of heath, upland grassland and bog of significant value for both plants and breeding birds, in addition to their expansive, open visual character. Pressure from overgrazing or drainage may lead to decline in these habitats.
- 5.23 For more than a century the majority of heather moorland in the National Park has been managed for red grouse shooting, resulting in a complex mosaic of heath, scrub and bog, rich in wildlife and supporting internationally important bird species such as golden plover and merlin. Pressures related to shooting requirements, over-grazing or drainage may lead to a decline in these habitats. (ref 4) Upland areas also provide a striking contrast to the more enclosed dales, with an extensive, often tranquil and open visual character.

#### *Over grazing*

- 5.24 In recent decades areas of heather and woodland on the fringes of moorland have been lost due to the effects of over-grazing, resulting from the intensification of sheep farming. More recently, however, landowners are working with conservation agencies to reduce the impact of grazing on moorland and to enhance moorland habitats (for example the North Pennine Moorlands Wildlife Enhancement Scheme run by English Nature, the Countryside Stewardship Scheme run by MAFF and the Northern Upland Moorland Regeneration Programme administered by ADAS). It is predicted that this trend will continue, resulting in the creation of a more diverse moorland character.

#### *Drainage*

- 5.25 Further impact has occurred through the cutting of 'grips' to drain moorland, in the belief that this would benefit both grouse and livestock. Gripping may adversely affect moorland habitats, may be visually intrusive through the introduction of regular patterns of lines and has the potential to increase erosion. From the 1970's to 1980's the Landscape Change in the National Parks study (ref 1) identified a 48% increase in the extent of area affected by gripping within the YDNP.
- 5.26 It is now widely recognised that restoration of natural drainage patterns is essential to the long-term survival of moorland habitats and landowners are working with conservation agencies to block grips and restore damaged wet grassland and bog habitats. The adverse visual and ecological effects of upland drainage may therefore be expected to be reversed in the future (ref 2).

#### *Management for Grouse Shooting*

- 5.27 Shooting requirements represent one of the main activities on the gritstone moors. The replacement or surfacing with stone of previously grassy tracks used by shooting parties is a key issue. Modern tracks are often surfaced with limestone aggregate and stand out starkly from the darker heather moors, or utilise material from lead mining tips, with impact on the historical resource. Remaining pressures are related to upland management including alleged persecution of birds of prey and inappropriate burning which results in loss of habitat diversity (ref 2). Whilst

often subtle or localized, these impacts may lead to further erosion of upland character.

*Bracken Encroachment*

- 5.28 Small areas of bracken often have little effect on landscape character but more extensive swathes can reduce visual diversity. From historical surveys (ref1) bracken encroachment in the National Park would appear to be stable. Providing existing appropriate management measures continue this is expected to remain the case.

*Public Access*

- 5.29 The Countryside and Rights of Way Act 2000 will encourage open access over moorland areas. This may lead to impacts such as increased erosion or vegetation damage, particularly near to obvious viewpoints or summits.

***Return to a More Natural Landscape***

- 5.30 Following the 1992 Earth Summit in Rio the importance of bio-diversity has gained greater recognition, being promoted at National level in the UK in 1994 by the publication of *Biodiversity: The UK Action Plan*, followed locally within the National Park by publication of *Nature in the Dales: A Biodiversity Action Plan for the Yorkshire Dales National Park* in August 2000. *Nature in the Dales* seeks to build on the 'vision' set out by English Nature (*Natural Areas: Nature Conservation in Context, English Nature 1998*) for the Cumbria Fells and Yorkshire Dales Natural Areas, within which the National Park is located. Briefly, aspects of the 'vision' which encourage change and which may have noticeable effects on landscape character are as follows:

- An increase in native woodland cover within the National Park from 1.5% to 3%, some in mosaic with heath and grassland and a 'sizeable' areas of shrub cover and tall-grown vegetation;
- Restoration of current expanses of acidic grassland to heather moorland and conversion of drained or heavily grazed hill pasture to rougher wetter vegetation;
- A return to the natural drainage pattern of the hills and valleys, with actively meandering rivers and significant areas of fen meadow, tall fen and willow carr;
- Up to 10% of the Dales, covering all main ecological land types, should be left to develop in an essentially unmanaged, more natural state.

- 5.31 In broad terms, biodiversity action plans support the preservation and creation of distinctive habitat and landscape character types, or the beneficial diversification of others such as the large expanses of acidic grassland. Nonetheless, the increasing emphasis on nature conservation is itself a pressure which may significantly change landscape character within some areas of the National Park (ref 2).

- 5.32 There are clear links between characteristic habitat types and the birdlife they support, which in turn adds to the visual diversity and richness of the Dales and moorland areas. Examples of these links include: wet, rush-dominated pastures supporting wader species such as curlew, lapwing, redshank, oystercatcher and snipe; moorland supporting golden plover, short-eared owl and merlin; hay meadows supporting yellow wagtails, meadow pipit and skylark. As the BAP meets its aims the subtle, landscape character benefits provided by wildlife should increase (ref 10).

***Trees, Woodland and Commercial Forestry***

- 5.33 Upland coniferous plantations established between 1950 and 1980 have had a significant impact on the landscape of a small area of the National Park. Proposals for coniferous plantings larger than 2ha within the National Park are now subject to environmental assessment regulations. Whilst no further large-scale coniferous plantings are expected there is now conservation-led pressure to increase the amount of broadleaved and mixed woodland, which may impact on landscape character in terms of scale, species choice and appropriateness to character type. Small-scale coniferous plantings, often used in the past as shelterbelts or for game cover, are not subject to the same controls as large-scale plantings yet have had a significant detrimental effect on landscape character in some areas of the National Park. Due to changes in grant regimes small scale conifer plantings are now seen as a past rather than present or future pressure (ref 2.)
- 5.34 Woodland has played, and continues to play, an important role in the Yorkshire Dales. Historically, it has provided timber for construction, fuel and tool making and provides cover for game birds. Remaining semi-natural woodland is generally fragmented existing as small pockets of gill woodland or open, grazed woodland on the steeper dale sides. Plantations range between small shelterbelts, larger woodlands associated with private estates (particularly within the south and south eastern areas of the National Park) and large-scale, alien coniferous plantations in the Langstrothdale area of the National Park. Small groups and individual trees along field boundaries, riversides and associated with settlements are also an important component of landscape character within the dales. Whilst the essential character of the Dales is of a traditional farming landscape, woodlands and tree cover contribute significantly to the detail and pattern of character within each individual dale and provide an important wildlife resource, adding to the diversity of habitat types found within the National Park.
- 5.35 Woodland is a scarce resource within the Dales, accounting for less than 3.6% of the National Park's area. Of this figure approximately 2% comprises coniferous plantation, 1% ancient woodland, 0.2% ancient replanted woodland, 0.1% new native woodland and 0.3% broad-leaved woodland plantation (eg beech and sycamore).
- 5.36 Woodland management and provision in the National Park is guided by the Dales Woodland Strategy which is informed by the Biodiversity Action Plan. The Woodland Strategy seeks to: retain and reinforce the local distinctiveness of natural and semi-natural woodland habitats; establish a sustainable woodland resource and double the current area of broadleaved woodland cover by 2020. These initiatives are likely to have a significant effect on future landscape character, which is expected to be beneficial if woodland design guidelines are followed and inherent landscape characteristics are respected.

*Woodland decline*

- 5.37 Semi-natural broadleaved woodlands are often even-aged and unmanaged. Decline has occurred in some woodland due to neglect and changes in management practice, for example the use of woodlands for shelter and grazing of livestock, a reduction in coppice management; the loss of elm, which has been a significant tree in the dales, through Dutch elm disease and a lack of new woodland planting. Grazing by rabbits and deer is also a factor in preventing woodland regeneration. Wood pasture is a traditional woodland form within the National Park but needs careful stock management to both maintain its pasture characteristics and also allow woodland regeneration. Established National Park policy is expected to address these issues, leading to an improvement in the health of existing woodlands (ref 10).

*Hedgerow and boundary trees*

- 5.38 Hedgerow and boundary trees are declining within the National Park, due to a combination of factors such as field amalgamation and changing management practice, for example mechanical cutting of hedgerows. These practices may lead to the loss of existing trees and prevent natural regeneration. The Woodland Strategy recognises and seeks to address this issue. The recent introduction of the Hedgerow Regulations may prevent removal of historic or ecologically valuable hedgerows, however, no comparable legislation exists to protect drystone walls.

*Juniper scrub*

- 5.39 Juniper scrub and woodland occurs as scattered remnants, particularly in Swaledale and around Ingleborough. Stands are dominated by old plants and, whilst being in natural decline, are showing signs that decline may be reversed by appropriate management. A balance is required between maintaining an open sward, which is necessary for juniper regeneration, and overgrazing. Such areas are protected through SSSI designation (ref 10).

*Improvement of existing coniferous plantations*

- 5.40 As existing even-aged, large-scale coniferous plantations approach their first rotation opportunity arises to design felling regimes and new plantings in a manner more sympathetic to landscape character and to increase biodiversity value. Within this context a key aim is to retain sufficient coniferous habitat to support and encourage the red squirrel population within the north western area of the National Park.
- 5.41 The Dales Woodland Strategy and BAP are driving improvements in the appearance, or replacement, of smaller-scale coniferous plantings.

*Amenity planting*

- 5.42 Exotic species may be appropriate within historic parks and gardens, or within settlements, leading to positive landscape benefits. Planting of ornamental or non indigenous trees on garden boundaries, in farmland and within country estates can, however, have a cumulative detrimental influence if it is out of keeping with the character of the landscape. Although awareness of this issue is improving, such planting is difficult or impossible to control and the park authority will need to rely on advice, guidance and education to ensure that wider landscape character is not eroded.

***Recreation and Tourism***

- 5.43 The Yorkshire Dales National Park attracts large numbers of UK and overseas visitors, the majority of whom come to experience beautiful landscapes, wildlife habitats and peace and quiet.
- 5.44 The last half of the 20<sup>th</sup> century has seen increasing growth in access to the countryside. In the case of the YDNP this is borne out by visitor surveys, for example 8.3 million visitor days were recorded in 1994. Recent surveys show that traffic figures within the National Park are increasing whilst vehicle occupancy is reducing. The Countryside Agency predict that, nationally, growth in access to the countryside is likely to continue. Initiatives, such as the Community Forests, are being promoted to provide alternative countryside access close to the major cities, but it is likely that demand for visits to 'special landscapes' including the National Parks will continue to grow. Visitors to the Park bring important financial benefits, supporting the rural economy. These benefits must be balanced, however, with the potential impact of increasing visitor numbers on the landscape, whether through

direct effects such as erosion or impact on wildlife or indirect effects such as loss of tranquillity, increased traffic, buying of holiday homes, inappropriate development of tourist-related business or increased demands on utilities infrastructure. The scenario must be avoided where visitor numbers increase to the point where they undermine the character and enjoyment of the National Park (ref 2).

5.45 Key areas where increasing visitor pressure is likely to have adverse character effects are as follows (*Note some information taken from YDNPA Access: Routes to the Future leaflet, April 1998*):

- 'Honeypot' destinations such as Malham Cove and some of the Dales villages, including Grassington and Ingleton;
- Footpath routes across fragile peat or heather moorland, such as the Three Peaks Walk, the Pennine Way at Fountains Fell or Wainwright's Coast to Coast route at Nine Standards Rigg;
- Lowland routes across important hay meadows, for example Muker Meadows in Swaledale, may be equally damaging to habitats of national importance.

5.46 The Biodiversity Action Plan recognises that much of the income from visitors is not directed at the landowners and managers who look after the landscape and wildlife of the Dales. The BAP considers that ways need to be found to ensure that the people who look after the features that attract visitors can benefit from the income generated from tourism.

*Tourism/ day visitors*

5.47 The number of day visitors and tourists coming to the Dales is increasing. With a rising average population age, increasing mobility and availability of leisure time it is predicted that the trend of rising visitor numbers will continue in the future. Tourism plays a vital role in the economy of the Dales but it also places considerable strain on some areas of the National Park, leading to adverse environmental impacts. Examples of these pressures include severe erosion of rights of way, traffic congestion, parking problems (and consequent damage to roadside verges), increasing commercialism within villages and a general pressure for new development to provide for and to attract visitors (ref 7).

*Large-scale tourist facilities*

5.48 Other National Parks are subject to large-scale tourist developments, such as hotel and conference centres, holiday 'villages' or time share and leisure complexes. Whilst the Local Plan presumes against such forms of development it also considers it 'only a matter of time' before pressure for them arises within the National Park (ref 7).

*Caravans and camping*

5.49 Static holiday caravan sites are presumed against in the Local Plan and are not therefore anticipated to create further pressure for change within the Park. Increasing demand may arise however for touring caravan and camping sites, either as new proposals or as extensions to existing sites (ref 7).

*Equestrian activities*

5.50 Demand for equestrian developments is increasing, in response to the growing popularity of equestrian centres and pony trekking. In addition to the impact of new buildings associated structures such as fencing, jumps and all-weather surfaces

may have an impact on landscape character. A secondary effect of increasing trekking activity is wear and tear on bridleways (ref 7).

#### *Outdoor Pursuits*

- 5.51 Rock climbing, pot holing, mountain biking, hang gliding and parasailing are becoming increasingly popular, and may lead to minor physical erosion (eg climbing and mountain biking) or visual impact and loss of tranquillity where concentrations of use occur. Often these pursuits occur in open areas such as moorland or cliffs, where the ability of the landscape to absorb visual impact is limited.

#### *Large-scale sponsored events*

- 5.52 The frequency of large scale sponsored events (for example walks or orienteering), attracting up to 1000 people at a time, is increasing. These events may lead to traffic and parking problems, impact on visitor facilities and short term, high impact effects on rights of way.

#### **Public Rights of Way**

- 5.53 Following implementation of the Countryside and Rights of Way Act 2000 (see leaflet *New Rights, New Responsibilities, Countryside Agency February 2001*), impact on fragile open moorland areas may increase. Conversely, the argument exists that the availability of access over open areas may reduce the damaging effects of the present concentration of access along limited public rights of way.
- 5.54 The use of motorised recreational vehicles (in particular four wheel drives and motorcycles), that can cause significant damage to unsurfaced routes in the Dales, may decline marginally following the implementation of the Countryside and Rights of Way Act. The Act contains some limited changes to legislation that require vehicle users to prove their claims for vehicular rights on routes of unclear status. However, the effectiveness of the legislation will continue to be dependent upon the willingness and ability of the police and the Crown Prosecution Service to take enforcement action. Measures to manage this activity will still be needed and should be designed to be sympathetic with their environment as well as being effective.
- 5.55 The importance of maintaining an appropriate character along public rights of way and roads is important as most visitors experience the wider character of the Dales from these routes. A degraded or urbanised right of way may spoil the sense of isolation or wildness even if the surrounding wider landscape remains intact (ref 5).

#### **Settlement Change and Expansion**

- 5.56 The former Countryside Commission used aerial photographs from the 1970's and late 1980's to compare changes in landcover within the National Parks (ref 1). Within this period it was calculated that the extent of developed land within the Yorkshire Dales National Park increased by nearly 10%. Whether this increase occurred locally or cumulatively across the whole of the National Park is not stated. What is clear, however, is a pressure to increase the extent of built up areas within the National Park.
- 5.57 Changes within the social and physical fabric of settlements are also occurring, reflecting the transition from an agricultural economy to one of increasing reliance on tourism, and the adoption of urban tastes and values. This change is manifested in the loss of functional building uses (for example barns and farms may no longer be used for agricultural purposes), the orientation of local business to the tourist market rather than local community needs (for example shorter or seasonal opening hours), seasonal pressure on services and, indirectly, closure of shops and schools.

Numerous small-scale changes such as inappropriate door and window replacements and garden boundary treatments together with highway-related changes, including kerbing, parking controls, signage and lighting may have a significant effect on traditional settlement character.

- 5.58 Many settlements in the Park have few, if any, remaining sites capable of further development. The visual assimilation of settlements into the rural landscape is a special attribute of the Yorkshire Dales. The Local Plan states that provision of additional housing and new employment must be balanced with preservation of the natural beauty of the Park.
- 5.59 Set against these controls is a national trend of migration from urban areas to the countryside (ref 14). Increasing demand for commuter use, work-from-home use, retirement or second homes within the National Park may lead to pressure for provision of more affordable housing for local people, or may result in pressure to convert redundant or under-used agricultural buildings. These pressures may alter the character of existing settlements, including pressures for infill development on settlements of Norse origin that are traditionally scattered, or lead to 'suburbanisation' of outlying hamlets, farmsteads or more remote Dales buildings (ref 7). Cumulatively, these changes could have a significant impact on otherwise unspoilt settlements or areas of surrounding landscape.

#### ***Communications, Power Generation and Distribution***

##### *Telecom masts and mobile phone infrastructure*

- 5.60 Given strong policy protection, large-scale telecommunications masts are not predicted to be a major future source of change within the National Park. Cumulative 'suburbanising' effects could arise, however, from pressure to provide mobile phone networks, particularly as technology within the industry changes and customer use becomes more widespread and service coverage expectations increase. Masts, buildings and tracks can have a very significant effect on sensitive landscapes (ref 7).

##### *Wind turbines*

- 5.61 Large-scale wind turbine developments are unlikely to be permitted within the National Park, but proposals for individual wind turbines for isolated farmsteads, where they would not detract from the character or amenity of the area, may be allowed. Pressure may therefore arise for numerous small wind turbine developments which, whilst being compatible with wider sustainability objectives, could have a cumulative visual impact on landscape character (ref 7).

##### *Overhead lines*

- 5.62 Overhead power and telecommunications lines, although generally small in scale, are a feature of even the most remote dale and contribute both individually and cumulatively to a decline in the unspoilt character of both landscapes and traditional settlements. Settlement expansion, employment provision or conversion of outlying buildings may require the provision of new utility service lines, either cumulatively or individually. Wherever possible, new lines should be placed underground to prevent visual impact and where upgrading of existing facilities is necessary, undergrounding of existing overhead lines should be strongly encouraged. Although this approach may preserve visual character care must be taken to avoid damage to the archaeological resource (ref 7).

*Digital television*

- 5.63 The use of satellite dishes may increase as digital television becomes obligatory in 2006. Although dishes can be sited discretely and coloured recessively their cumulative use may still impart a 'suburbanising' effect, particularly within otherwise unspoilt villages and hamlets.
- 5.64 Pressure may increase for the use of solar panels in buildings. As for satellite dishes, these can potentially exert a suburbanising influence within settlements, although with design development (for example being designed to the same form and colour as roof tiles) they may be unobtrusively incorporate into traditional buildings.

*Hydroelectric power and water collection*

- 5.65 In response to global warming and energy issues, future pressure may arise for the construction of hydroelectric schemes or increased reservoir provision within the National Park.

**Roads and Traffic**

- 5.66 Most roads within the National Park remain narrow and winding, often contained between drystone walls, or following historic routes (eg drove roads) and add to the distinctiveness of the Dales landscape. With increasing visitor numbers and changes to vehicle sizes (for example increasing coach and HGV size) pressure may arise for local road improvement schemes, which may inevitably lead to loss or dilution of existing character. Similar pressure for change may occur at bridges which, having been designed for smaller vehicles, can act as a constraining factor on the road network yet are often of historic, visual and nature conservation value. Improvement in roads can also bring increasing traffic. Many highway improvements are not subject to planning controls and are undertaken as part of ongoing maintenance works rather than as part of a controlled design exercise

*Highway improvements/lighting/signage/kerbing*

- 5.67 Highway design standards, lighting, kerbing and road signage can all lead to loss of distinctive local character, but may be necessary to meet safety requirements, particularly if vehicle numbers and sizes increase.
- 5.68 A considerable range of measures are outlined in the Local Plan to balance highway needs with preservation of local character but it must be assumed that pressure for change will remain as vehicle design standards evolve and the number of road users increases.
- 5.69 An increase in the number of visitor attraction signs (brown signs) has occurred in recent years, adding to roadside clutter.
- 5.70 Pressure may arise for improved lighting of roads, which may give rise to impacts on landscape character (eg visual effects of lighting columns) or intrude upon the tranquil night-time scene and dark skies.

*Verge and roadside tree and hedgerow management*

- 5.71 Road verges are a minor overall part of the Dales landscape character but can play a significant role in the appreciation of the Dales by visitors, being a foreground element in many views. Inappropriate management can diminish species diversity and visual character of verges. This issue is to be addressed through the biodiversity action plan, which proposes a programme of monitoring together with a review of management practices to strike a balance between safety, biodiversity value and cost.

- 5.72 Similarly, roadside trees, and hedgerows where they occur, can play a significant role in appreciation of the landscape by the visitor and overzealous or poorly executed management can affect enjoyment.
- 5.73 Pressure on verge, tree and hedgerow management is likely to be directly related to available highway maintenance budgets and awareness amongst maintenance staff of ecological management issues (eg correct mowing times, frequency of cutting, tree care issues).

#### ***Quarries***

- 5.74 Long term pressure for quarrying is likely to remain whilst ever there are economically recoverable mineral reserves in the National Park. High quality limestone will continue to be mostly used for construction purposes, also in the chemical industry and in the power industry, as part of the flue gas desulphurisation process.
- 5.75 Providing the Park Authority can maintain the present strict planning controls within the National Park, and given the extent of permitted reserves, it is unlikely that new quarries or lateral extension of existing major quarries will occur, although exceptions may occur (for example at Horton in Ribblesdale).
- 5.76 A number of smaller quarries may be reopened to supply traditional local building materials, for example roofing stone. These are expected to be small-scale workings and would be unlikely to have a significant effect on landscape character.

#### ***External Influences***

- 5.77 Landscape character within the fringing upland areas of the National Park is sensitive to external visual change. Increasing pressure for developments such as windfarms, telecoms masts, transmission lines, large-scale forestry, water management (eg pipelines, service reservoirs, pumping stations) or highway improvement schemes (eg along the A65 corridor at Gargrave, Hellifield and Long Preston) may result in impact on the character of these surrounding areas of landscape with, in turn, impact on areas of landscape within the National Park. Co-ordination of planning policy, environmental impact assessment and consultation between planning authorities may, however, control inappropriate development in these areas or minimise any adverse impact.

#### ***Aerial Pollution and Climate Change***

- 5.78 Aerial pollution and climate change may impact adversely on all habitats within the National Park but certain habitats would be more sensitive to change. For example, montane and open water habitats would be subject to damage by acid rain whilst mires and heathlands would be vulnerable to nutrient deposition. In landscape character terms these changes may be subtle, occurring over long periods of time but could erode existing upland character and distinctiveness through loss of habitat and the wildlife it supports (eg upland waders and birds of prey) (ref 12).
- 5.79 Increasing rainfall may have implications for upland drainage patterns and washland areas within the valley bottoms, leading to increased erosion and provision of flood defence structures, which may be damaging or visually inappropriate in their own right.
- 5.80 The need to meet reduced greenhouse gas emission targets may increase the pressure for renewable energy forms within, or adjacent to, the Dales such as wind energy. This may have visual implications for remote upland areas within the National Park. Increased use of flue gas desulphurisation processes or clean coal technology may increase pressure for limestone quarrying.

### **Geological and Archaeological Features**

- 5.81 Geological features, which form a distinctive part of the Dales character, are subject to a number of pressures. Although many of the pressures are of a small-scale nature their cumulative effect could lead to a general deterioration of the important geological resource within the Park:
- Gradual loss of geomorphological features (eg moraine fields, erratics) due to clearance for agriculture and forestry;
  - Quarrying and mineral extraction remains a potential pressure, from existing workings and by virtue of commercial value of the geological resource within the Park. Planning controls are, however, anticipated to control this activity;
  - Despite the protection of Limestone Pavement Orders illegal quarrying remains a threat until such time as the market for water worn rockery is removed;
  - At a local level, tipping or landfill in disused quarries or pits could lead to loss of existing geological exposures in addition to archaeological, ecological and visual impacts;
  - Afforestation in both the uplands and lowlands can obscure or damage geological and archaeological exposures;
  - Recreational or commercial mineral and fossil collecting can damage exposures or old mine dumps;
  - Mine spoil may be depleted for agricultural or engineering use, for example in the construction and maintenance of hardstandings and tracks (ref 12);
  - Cave entrances may be opened up, with impact on surface features and subsequent impact on the underground geological resource;
  - Road safety or maintenance improvements can lead to the loss of roadside geological and archaeological features;
  - River engineering and flood defence improvements can adversely impact on fluvial sites.

### **Public Opinion**

- 5.82 Between 1989 and 1990 the potential future of the Dales landscape was explored through the 'Landscapes for Tomorrow' public participation exercise, organised by the National Park Authority (subsequently published as *Landscapes for Tomorrow: Interpreting Landscape Futures in the Yorkshire Dales National Park, YDNP Committee 1992*). The aim of the exercise was to explore public perception of the landscape within the National Park and how the landscape could change in response to changing land use pressures, in particular agricultural changes.
- 5.83 A range of landscape 'scenarios' were presented to the public ranging between today's landscape, abandoned, conserved (ie as today's landscape but with landscape features strengthened or reintroduced), intensive and wild.
- 5.84 Both visitors and residents expressed a clear preference for the 'today's landscape' followed closely by the 'conserved landscape'. Lesser support was shown for the 'wild' landscape, followed by very little support for the abandoned, semi-intensive,

intensive or leisure orientated landscapes. Public perception of the importance of landscape features followed the above pattern with hay meadows, drystone walls, stone barns, broadleaved woodland and heather moor being seen as important features and silage meadows, wire fences, modern sheds and conifer woodland as features which should be reduced. Strong support was expressed for more rural communities and more public access. Support for public access was however, almost equally offset by a corresponding number in favour of less access.

- 5.85 From the exercise it can be concluded that public pressure is likely to be strongly in favour of retaining the traditional 'Dales landscape', either in the form it was in 1992 (at the time of the exercise) or in a conserved form, where important features are well-managed or reintroduced. Conflict may arise with these aims, however, from public pressure to increase the size of rural communities and increase public access. There is also potential for conflict between public opinion and the aims of Nature in the Dales which seeks to increase the area of wild unmanaged habitat. Effects on the landscape of the National Park are, however, likely to be gradual, allowing the public to become slowly acclimatized to any changes which may occur.

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