



ADVANCED GCE
GEOGRAPHY B
Issues in Sustainable Development

2692/RB

RESOURCE BOOKLET

JUNE 2009

This booklet is available for use by teachers and candidates not earlier than six working weeks before the examination.
It can be taken into the examination but must not be annotated in any way.



INSTRUCTIONS TO CANDIDATES

Candidates are reminded that this synoptic unit requires you to draw upon your knowledge and understanding of the relevant physical and human processes you have studied and the connections between different aspects of geography represented in your course. You will also be required to show a knowledge and understanding of the content of Module 2692 (Issues in Sustainable Development).

LANDSCAPE
As a resource under pressure

[As this is such a broad topic, the resource booklet is focused on examples from the UK. It will be necessary for candidates to seek out their own examples of landscapes in their local area and/or in other countries to illustrate similar or contrasting issues at appropriate scales. The questions posed can act as a framework for further study.]

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INFORMATION FOR CANDIDATES

- This document consists of **32** pages. Any blank pages are indicated.

INTRODUCTION

Why is landscape such a broad topic? The fact that landscape surrounds us at all times and yet we rarely notice it is probably why we often value it so little. It is commonplace. It is where we live, whether urban or rural. It is the view we have through the window. Some views may be regarded more highly than others, but the judgement is generally entirely subjective and personal. However, where there is broad unanimity of opinion, certain landscapes gain universal acclaim. Yet due to human use of the Earth, growing populations are putting increasing pressure on all landscapes, and societies have to make decisions about how best to use the land available. It is a resource in just the same way as water or fuel.

Landscape is a crucial aspect of the environment that can improve the quality of life and lift the spirits, yet land is also an extremely valuable resource. How can landscapes best be managed sustainably in order to maintain the balance between aesthetic needs and the enormous pressures that society inflicts upon them?

Section A: What is Landscape?

The Dutch artists of the 16th century were some of the first to identify elements of the natural world that were worth painting. It is probably this appreciation of the physical landforms and the ways in which light, weather, flora and fauna contribute to its aesthetic value that underpins our understanding of the term landscape today. Use of the term and acceptance of the value of landscape has grown and changed over time.

Think of the number of different phrases that use 'landscape', for example 'landscape architecture' or 'landscape gardening'.

A number of different landscapes have been identified.

- **Geological Landscape:** this is the study of the geology, geomorphology and hydrology of the area.
- **Landscape Habitats:** looks at the distribution of vegetation and habitats and the basis for landscape ecology.
- **Visual & Sensory:** this aspect identifies those landscape qualities that are perceived through human senses. It deals with the individual physical attributes of landform and land cover, as well as their visual patterns of distribution and sensory characteristics, and the relationships between them in a particular area.
- **Historic Landscape:** focuses on how archaeological and historical sites relate to each other and to the surrounding landscape.
- **Cultural Landscape:** this considers the relationship that exists between people and places; how people have given meaning to places, how the landscape has shaped their actions and their actions have shaped the landscape.

Why is it important?

According to the European Landscape Convention 2000 (<http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm>),

“The landscape...

“has an important public interest role in the cultural, ecological, environmental and social fields, and constitutes a resource favourable to economic activity and whose protection, management and planning can contribute to job creation;

“...contributes to the formation of local cultures and ... is a basic component of the European natural and cultural heritage, contributing to human well-being and consolidation of the European identity;

“...is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding natural beauty as well as everyday areas;

“...is a key element of individual and social well-being ... and its protection, management and planning entail rights and responsibilities for everyone.”

Think of the landscape in your area. How does it contribute to your quality of life? Which parts of the rationale quoted above would relate to your local area? Would you rank some elements as being more important than others? Why?

What is 'Quality of Life'?

The Industrial Revolution, with its consequent mass rural to urban migration, changed the lifestyles of millions of people. In the rapidly built urban areas, housing, mines, mills and factories changed the landscape irrevocably. Pollution of air and water led to disease which could spread amidst the overcrowded living conditions that most of the workers inhabited. The wealthy merchants and entrepreneurs built themselves grand houses on the outskirts of the cities while overseeing the 'ravaging' of the land for the wealth it could create. The rise of the natural sciences, geology, ecology and physiology coincided with the rise of Romanticism in poetry, prose and music. It was the start of the realisation that quality of life could be enhanced by caring for the landscape and providing access to it for everyone.

What is your understanding of 'Quality of Life'?

Do we need Tranquil Areas?

In 1926 the Campaign for the Protection of Rural England (CPRE, <http://www.cpre.org.uk>) was formed as an environmental group to monitor and protect English landscapes. One measure of the quality of the landscape at a particular place is its tranquillity: the CPRE has created national and county level maps (<http://www.cpre.org.uk/campaigns/landscape/tranquillity/county-tranquillity-maps>) based on up to 44 different factors of the landscape.

Consider what makes an area tranquil, and why such areas are valued.

England with 2001 regional boundaries

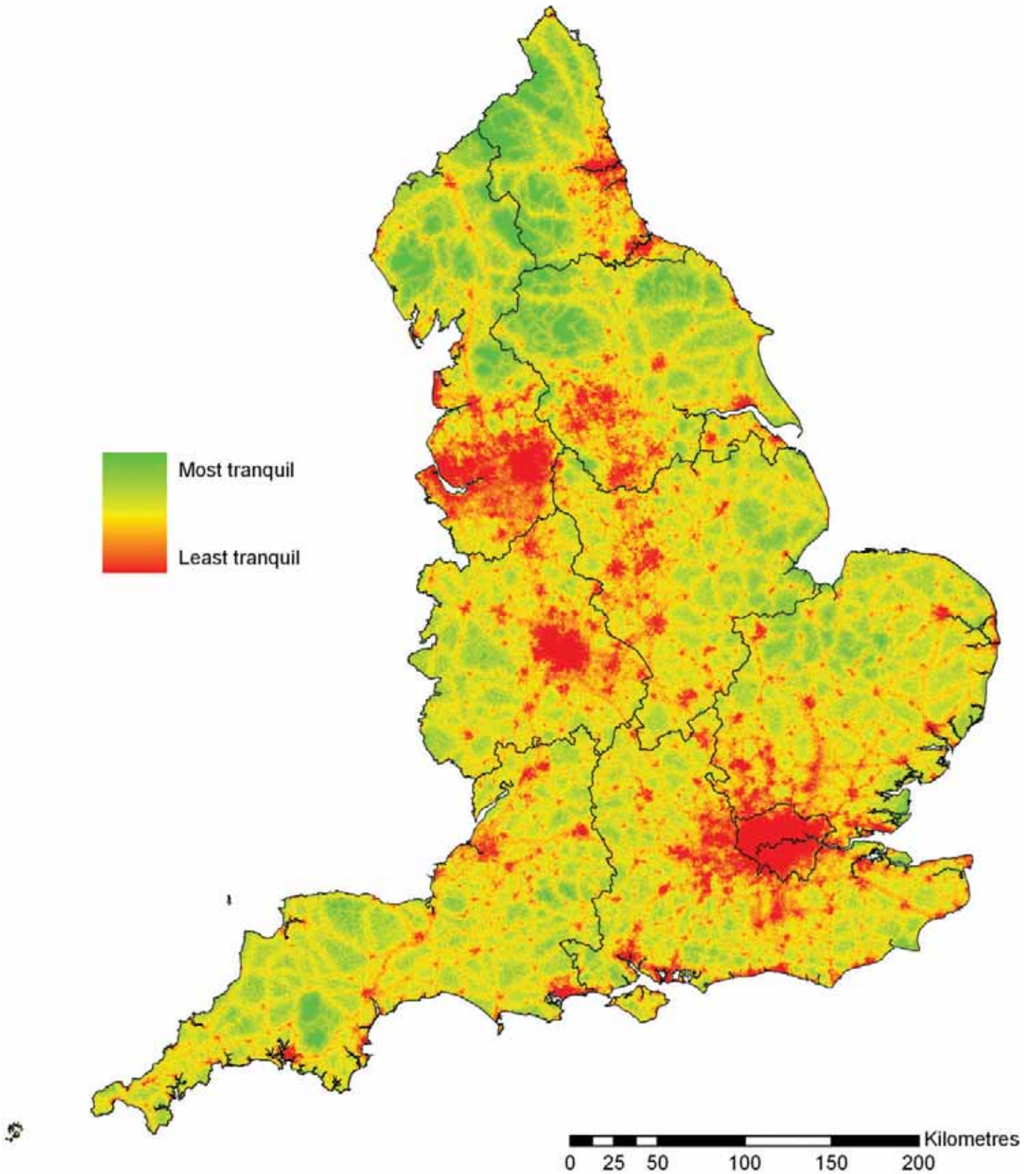


Fig. 1 Tranquillity Map of England (CPRE)

Why protect habitats?

The early pioneers of conservation, such as Gilbert White in Hampshire, were often amateur naturalists and social reformers. There was a belief that a civilised society should have access to the areas of natural beauty. It is also suggested that conservation is the act of a wealthy and urban population. The National Trust, the Royal Society for the Protection of Birds and the various civic amenity societies all grew out of recognition of the need to safeguard both the natural and built environments. As the vulnerability of certain environments was recognised, both money and political will were required to protect them.

Urban landscapes have also been recognised as providing valuable habitats for wildlife as well as providing green space. Brownfield sites and derelict areas also need to be considered for their environmental significance.

Eighty percent of rural land is farmed. Much of the land ownership is in large private estates. While farmers are concerned to earn a living, they are often interested in the wildlife and landscape that provide the setting for their lives. The Wildlife and Countryside Act of 1981 reinforced the statutory duty of the Nature Conservancy Council (then English Nature, now Natural England) to identify the country's most important areas of wildlife and geological interest as Sites of Special Scientific Interest (SSSIs). It was then required that farmers and other land users inform the relevant conservation agency of any operations they might wish to carry out that could be damaging to the SSSI area. (There will be more about management later.)

What about Heritage?

*'To this school the task has come, caught our youth and laughter,
That a greater heritage we bequeath hereafter.'*

The final lines of a school song (written in the late 1920s) suggest why we should think to the future, and ensure that landscapes and our cultural heritage should be cared for on behalf of future generations.

Consider what heritage means to you, and which places in your locality could be considered to have a value that may not be measurable in monetary terms.

Cultural heritage is deeply interwoven with the landscape, as human activity has always modified the natural landscape. Traces of ancient settlements can often be identified in the current landscape. Some periods of development such as the Industrial Revolution are seen to be particularly significant, and add a further dimension to the decisions that have to be made when land use changes are proposed.

Section B: What makes a natural landscape distinctive?

We are fortunate to have a wide diversity of landscapes in Britain. This diversity has its foundation in the rock types and structures. From the oldest rocks in the country in the far North West to the most recent alluvial sediments, every area of the country has characteristics that are distinctive.

There is a rough boundary called the 'Tees-Exe' line which divides Britain into the lowland landscapes to the south and east and highland Britain to the north and west.

Study the following photographs, and find out more about each type of landscape. They represent the most commonly found rock types of the UK. Consider the structure, vegetation and land use of the landscapes shown. Think particularly about the natural processes that have shaped the landforms and the human influences that are acting upon it. Do not forget the effects of climate too.

Lowland Britain

Chalk downland



Fig. 2 Fovant Down, South Wessex Downs

Jurassic Limestone



Fig. 3 Leckhampton Hill, Gloucestershire

Clay vales



Fig. 4 Dedham Vale, East Anglia

Coast



Fig. 5 Wash coast, Norfolk

Upland Britain

Carboniferous limestone



Fig. 6 Carboniferous limestone, Yorkshire Dales

Sandstone moorlands



Fig. 7 Brecon Beacons

Granite moorlands



Fig. 8 Fionnsahagh, South Harris, Western Isles

Volcanic

Fig. 9 Arthur's Seat, Edinburgh

These are a few examples: what others are there?

Section C: What about the human landscape?

Here the natural landscape has been altered and adapted to suit the ways in which people want to utilise the land.

City Settlement



Fig. 10 Central London

Housing Estate



Fig. 11 Blandford Forum, Dorset

Park and Leisure facilities



Fig. 12 Churchill Gardens, Salisbury

Transport



Fig. 13 Southampton West Docks

Business



Fig. 14 Business Park, Old Sarum

Agriculture



Fig. 15 Wensleydale, Yorkshire

It could well be argued that there are very few landscapes in the British Isles that have not undergone some alteration by human activity. Consider which activities enhance the landscape, and which detract from it. What other human landscapes are there?

Section D: How do perceptions differ?

Poets and artists have recorded their responses to the landscape over the centuries. An individual's perspective may change with time and so too does the perspective of whole populations and generations.

Literature

Milton, in an extract from his poem 'L'Allegro' in 1631, shows the lyrical appreciation of a rustic landscape in the language of his time:

Straight mine eye hath caught new pleasures
 Whilst the landscape round it measures
 Russet lawns, and fallows gray,
 Where the nibbling flocks do stray;
 Mountains, on whose barren breast
 The labouring clouds do often rest;
 Meadows trim with daisies pied,
 Shallow brooks, and rivers wide;
 Towers and battlements it sees
 Bosom'd high in tufted trees,
 Where perhaps some Beauty lies,
 The Cynosure of neighbouring eyes.

Nearly two centuries later, Wordsworth described the scene in early morning London...

Upon Westminster Bridge
Sept.3, 1802

Earth has not anything to show more fair:
 Dull would he be of soul who could pass by
 A sight so touching in its majesty:
 This City now doth, like a garment, wear
 The beauty of the morning; silent, bare,
 Ships, towers, domes, theatres, and temples lie
 Open unto the fields, and to the sky;
 All bright and glittering in the smokeless air.
 Never did sun more beautifully steep
 In his first splendour, valley, rock, or hill;
 Ne'er saw I, never felt, a calm so deep!
 The river glideth at his own sweet will:
 Dear God! The very houses seem asleep;
 And all that mighty heart is lying still!

William Wordsworth

Think about the geographical references in the poems and how they relate to the landscape as seen by the poet. How do today's landscapes compare?

Visual Arts

Artists have also recorded their interpretation of the landscape, often as commissioned work from wealthy landowners and reflected the cultural values of their age. Some will therefore appear very romantic in tone while others, particularly in the 20th century, are more realistic. Think about the images that follow and consider how views (both opinions and appearances) might have changed since they were painted.

John Constable



Fig. 16 John Constable: The Haywain, 1821 (Flatford Mill, Suffolk)

Compare this with the same scene as it is today.



Fig. 17 Willie Lott's cottage, Flatford Mill – 2007

L.S. Lowry 1887-1976



Fig. 18 Industrial Landscape 1955

The landscape above is fictitious, inspired by Salford, Stockport and Pendlebury, near Manchester.

Music

Music has also been inspired by landscape. Mendelssohn's Hebrides Overture (Fingal's Cave) is one example; Sir Paul McCartney's 'Mull of Kintyre' is another.

Felix Mendelssohn undertook a tour of Europe in his early twenties. A walking tour in Scotland in 1826 provided him with powerful impressions that he captured in a sketch book to be used in a number of compositions he completed over the following years, such as Fingal's Cave. Fingal's Cave is formed from Tertiary volcanics that are scattered across the Western Isles and Northern Ireland. The cave, which lies on the coast of the island of Staffa between Tiree and Mull, is twenty metres wide and over sixty metres deep. Huge hexagonal basalt rock pillars stretch high out of the sea. Waves constantly crash against the rocks, echoing through the cave. Mendelssohn wonderfully captures the swell of the mighty ocean around Fingal's Cave, using the original 20-bar phrase of music that he first wrote on his visit.



Fig. 19 Staffa

Sir Paul McCartney had a farm on the Mull of Kintyre in Scotland in the 1970s which formed the inspiration for a very popular song released in 1977 which has sold over two million copies. The lyrics voice the longing for a remote and wild part of the Scottish landscape.

What other artists – including painters, writers, and musicians have represented landscapes in their work?

Section E: How do we evaluate landscape?

In order to make judgements about the value of landscapes, and how to manage them, geographers (and other people such as planners) have tried to create methods of evaluation that seek to minimise the subjectivity of personal opinion. Often landscape quality is defined as including a wide range of environmental/ecological, socio-cultural and psychological factors, and so its evaluation is problematic.

Subjectivity or objectivity?

If we give our own opinion on something it is usually subjective – a view that we have formed for ourselves based upon our own experience. An objective judgement is made upon the basis of verifiable unbiased evidence. While physical geographers have devised ways of measuring landscape parameters to reflect visual quality and other physical characteristics (the quantitative, objective approach), human geographers have investigated individual and societal attitudes toward landscape (the qualitative approach which takes into account a degree of subjectivity). Public preferences are often investigated using questionnaires, but are unavoidably linked to the problems of consensus. Recent research has managed to combine the two approaches by focusing on evaluating the complexity of landscape using the judgements of panels of human subjects (qualitative), and quantitative techniques. The importance of this approach is that results can be reproduced over a wide area with as consistent results as in any scientific experiment.

Landscape evaluation methods¹

There are various methods of landscape evaluation. Descriptive inventories include ecological and formal aesthetic models which are mostly applied by experts in an objective manner. Think about how many variables need to be taken into account.

Economics of landscape evaluation

How can a view of landscape be valued? Two identical houses, but one with a view and the other without, will have a different value, but it is not possible to quantify the tangible benefits of the view. Traditional economic analyses have generally failed to account for assets, such as the aesthetics of the landscape, which have no tangible market value. The effect of excluding these non-monetary elements from economic decisions is that they have entered the system as if they were free. Recognition of this problem has, in part, motivated attempts to put a financial value on scenic resources. If applied to aesthetic resources, redefinition would require putting a price on scenic beauty or charging for its “use”.

¹ See <http://www.macauley.ac.uk/ccw/task-two/evaluate.html> for a review of landscape evaluation methods related to wind farms

Methods of scenic resource financial valuation

Several methods have been used to obtain values for scenic resources. *Willingness-to-pay* values (how much will a person pay to preserve trees in a landscape?), *revealed demand* (does a person take a different route to see a particular landscape?) and *opinion surveys* (does a person complain to his MP if development is allowed?) are only a few of the methods used. Opinion surveys often result in undervaluation: people do not always record formally their opinions. Revealed demand is complicated by the necessity of identifying and measuring all of the variables acting on the situation.

The travel cost method (TCM) uses a sample of visitors to a site to evaluate how much they are prepared to pay (in terms of time and money) to visit the site, and what benefits they think they have received from the visit in terms of the environment. The survey itself asks them factual questions about the origin of their journey to the site, their mode of transport and perhaps about other costs incurred and their own socio-demographic characteristics.

Willingness-to-pay (WTP) studies can assist in valuing today's landscape; they also attempt to value the benefits which residents and visitors might derive from alternative landscapes which could arise at some time in the future.

Hart District Council: an example of one approach to landscape evaluation at a local scale²



Fig. 20

Hart District comprises gentle rolling wooded countryside in the north-east corner of Hampshire and takes its name from the little River Hart which flows through its centre. There are a few mineral workings, but most of the land is farmed. A lot of land is owned by the Ministry of Defence and the Forestry Commission. The opportunities for outdoor recreational activities are many and varied.

Hart District has a varied and widespread architectural heritage with approximately 1000 buildings listed as being of special architectural or historical interest. There are also at present 32 Conservation Areas.

²See www.hart.gov.uk

Landscape Evaluation Criteria

As a first step in the landscape evaluation process, a number of broad criteria were defined against which each individual landscape type is assessed. The evaluation is based upon consideration of the following attributes:

- *scenic quality* – the degree to which the landscape is attractive with pleasing patterns and combinations of landscape features
- *sense of place* – the extent to which the landscape has a distinctive character and sense of place
- *unspoilt character* – the degree to which the landscape is unaffected or affected by intrusive or detracting influences
- *landscape as a resource* – whether the landscape type represents a scarce or especially fragile landscape resource
- *conservation interests* – whether there are other notable conservation interests that contribute to landscape value

Each landscape type is assessed against these criteria using the experience and judgement of the study team and is allocated to one of three quality categories, as follows:

Category A:

Landscapes which have a high scenic quality, a strong sense of place, are generally unspoilt and have a highly distinctive character, and often contain areas or features of ecological or cultural significance. They may also include 'intact' examples of rare landscape types, e.g. heathland, or representative examples of valued landscapes, e.g. chalk scenery.

In these landscapes, conservation is an overwhelming priority in order to maintain landscape quality. The need for intervention in the management sense will be comparatively modest but, nevertheless, these landscapes could still benefit from enhancement and management, such as the restoration of broadleaved woodland and heathland in areas dominated by coniferous plantations. Development is not necessarily precluded but the level of intervention in the planning sense will need to be high in order to prevent adverse change and loss or damage to particularly valuable landscape resources.

Category B:

Landscapes which have attractive qualities and where character and sense of place are still strong but which are not 'special' or distinctive to the same degree as those in Category A. The landscape generally has a positive, rural character but there may be intrusive influences or signs of neglect or decline in landscape condition which compromise its quality. These landscapes form the major part of the District's landscape resource and are important to conserve. They would, however, also benefit from enhancement, to improve landscape quality, strengthen local distinctiveness and reduce the influence of negative features.

Development and land use change will need to be controlled to ensure that there is no further deterioration in landscape quality or loss of local character.

Category C:

Landscapes which are further along the scale of decline and where landscape structure is substantially weakened and landscape quality and sense of place are significantly compromised by inappropriate development, poor land management or other intrusive influences, e.g. built development, airfields, pylons etc.

These landscapes require a substantial degree of management intervention to raise their quality and mitigate the influence of detracting land uses or features and could be the target for landscape enhancement priorities. In terms of planning intervention, the emphasis is on the encouragement of landscape improvements and restoration of a positive character as part of any future land use proposals.

Conclusions

It is apparent that a high proportion of Hart District is blessed with attractive landscapes in good or fair condition (in either category A or B) with few degraded landscapes (Category C). As stated earlier, given this overall high quality standard, the distinctions between the three categories are comparatively subtle and even the Category C landscapes are not severely degraded.

The 'best' quality landscapes (i.e. Category A) principally comprise the more *enclosed chalkland landscapes* with a higher frequency of woodland and stronger hedgerow structure (which provide a pleasing diversity and pattern of landscape elements compared to other areas of denuded chalkland landscape, which are comparatively unspoilt by intrusive influences, and which are representative of a valued landscape resource). In preparing and interpreting the evaluation, there are several important qualifications that should be borne in mind:

- it is important to stress that this evaluation is based upon an assessment of the *intrinsic quality* of the different landscape types, rather than a relative assessment of one against another, since such comparisons are generally unhelpful and highly subjective;
- the evaluation is based upon the *existing quality* of the landscape as observed during this study and does not take into account past or potential landscape quality;

- the evaluation of intrinsic landscape quality does *not* imply a greater or lesser ability to absorb development or change. It can, however, provide a useful guide to the most appropriate strategy for *intervention* in the landscape, either to control damaging change or to encourage positive enhancement;
- individual areas need to be assessed on their merits but, as a general rule, it is likely that the better quality landscapes will require a higher degree of *planning intervention* (i.e. through development control and the application of design standards) and a lesser degree of management intervention (i.e. action intended to raise the quality of the landscape through management and enhancement), to maintain their quality. Conversely, at the opposite end of the quality spectrum, the need to raise landscape quality may result in a higher degree of management intervention and a more positive approach to planning intervention to achieve beneficial change in the landscape;
- finally, it is also important to stress that these distinctions relate to differences observed along a quality continuum within the context of Hart District and should not be interpreted within a wider county or national context. The overall quality of the landscape of Hart District is high in comparison with many other parts of the region, and therefore even those areas of inferior quality in Hart District still generally represent areas of attractive countryside in the wider context.

Section F: Why are landscapes under pressure?

What are the threats and conflicts?

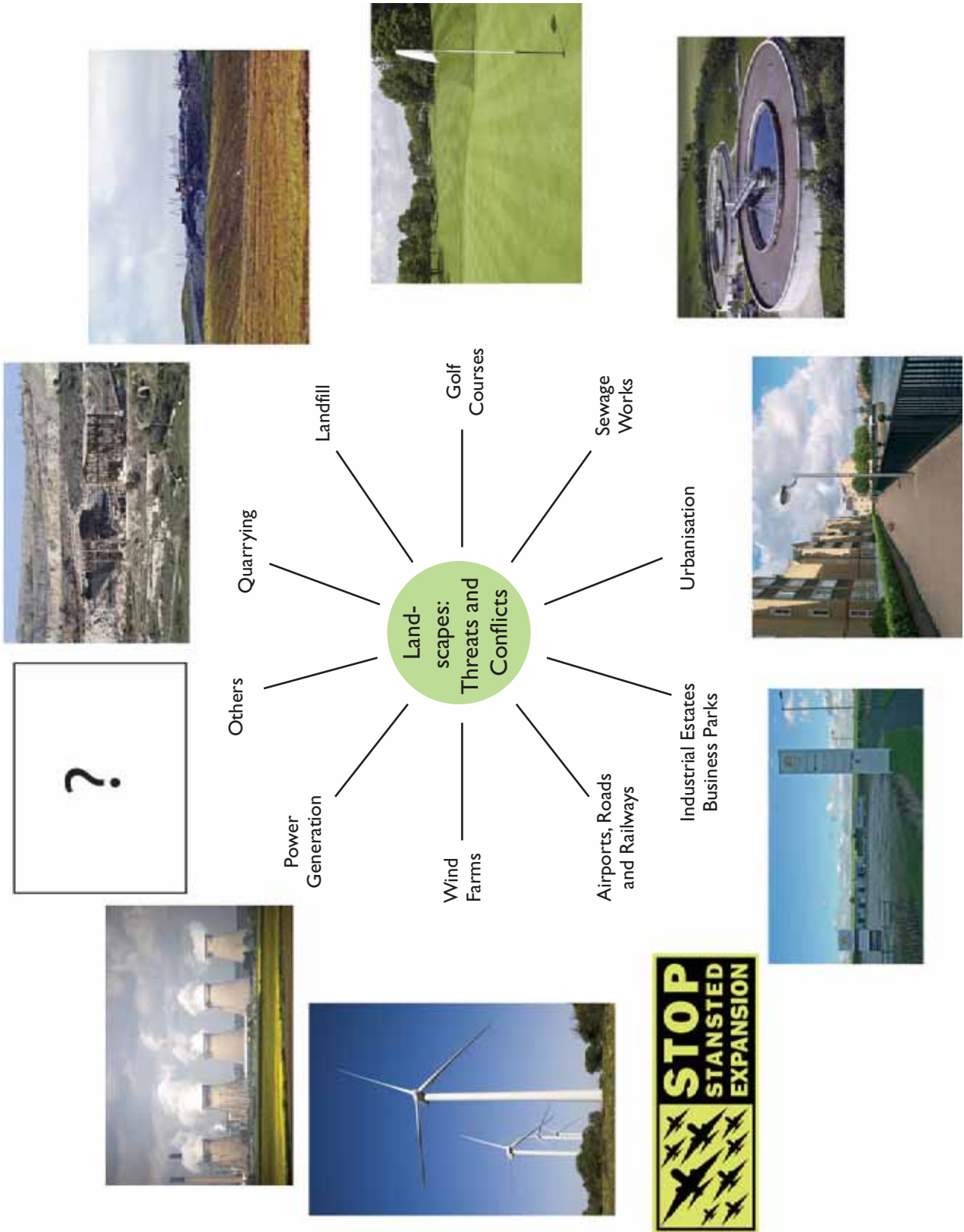


Fig. 21

Section G: How should landscapes be managed to ensure sustainability?

How can landscapes best be managed to ensure sustainability? Socio-economic change is powered by scientific and technological innovation, income growth, population growth and urbanisation. Well-functioning urban areas drive growth in productivity, employment and social transformation. Investment in infrastructure affects land use and public space, and therefore affects the quality of life. Many natural assets have been viewed as though they were openly available to everyone and were infinitely renewable. We now know that pressure on natural resources has increased dramatically with growing populations and is resulting in conflicts over land ownership and use.

How many aspects of sustainable development could be included in the management of your school/college grounds? What materials would best reflect or improve the local landscape? What conflicts have to be dealt with? How can improvements be made to ensure future generations inherit a *pleasant* landscape? (Ref: Learning Through Landscapes: www.ltl.org.uk)

Landscape Strategies

To manage the landscape, decisions have to be made in response to the quality and condition of the area being considered. One matrix, adopted by Exmoor National Park in order to evaluate its landscape strategies, measures the quality of landscape by matching the strength of the character of the landscape against the condition of that landscape. (<http://www.exmoor-nationalpark.gov.uk/lca-introduction.pdf>) The strength of the landscape character is a judgement of how the combined landscape components create a distinctive sense of place. The condition of the landscape is a judgement of how intact are those components and the relationships between them.

The resulting matrix (shown below) indicates the strategies that should be adopted for each of the different qualities of landscape:

		Strength of landscape character		
		Weak	Moderate	Strong
Landscape Condition	Good	Moderate <i>ENHANCE</i>	Moderate – Good <i>CONSERVE AND ENHANCE</i>	Good <i>CONSERVE</i>
	Moderate	Poor – Moderate <i>ENHANCE AND RESTORE</i>	Moderate <i>ENHANCE</i>	Moderate – Good <i>CONSERVE AND ENHANCE</i>
	Poor	Poor <i>RESTORE/ CREATE</i>	Poor – Moderate <i>ENHANCE AND RESTORE</i>	Moderate <i>ENHANCE</i>

Fig. 22

Key to Terms Used

- Conserve:** where the landscape quality is good (due to good condition and strong character) there should be an emphasis on protecting or safeguarding the key features and characteristics of the landscape as they are.
- Enhance:** emphasis should be to improve features that have fallen into decline. This may include improvements to landscape management practices and the introduction/removal of elements or features in order to strengthen character and/or improve perceived condition.
- Restore:** emphasis should be on repairing or re-establishing features that have been lost or are in a state of severe decline.
- Create:** where the landscape quality is poor (due to poor condition and weak character) and there is a need to form a new and different landscape for the benefit of people and the environment.

There are alternatives that might be considered, such as 'doing nothing', restricting access or limiting development.

What systems are already available?

There are numerous legislative controls on landscape and bodies involved in protecting and managing them.

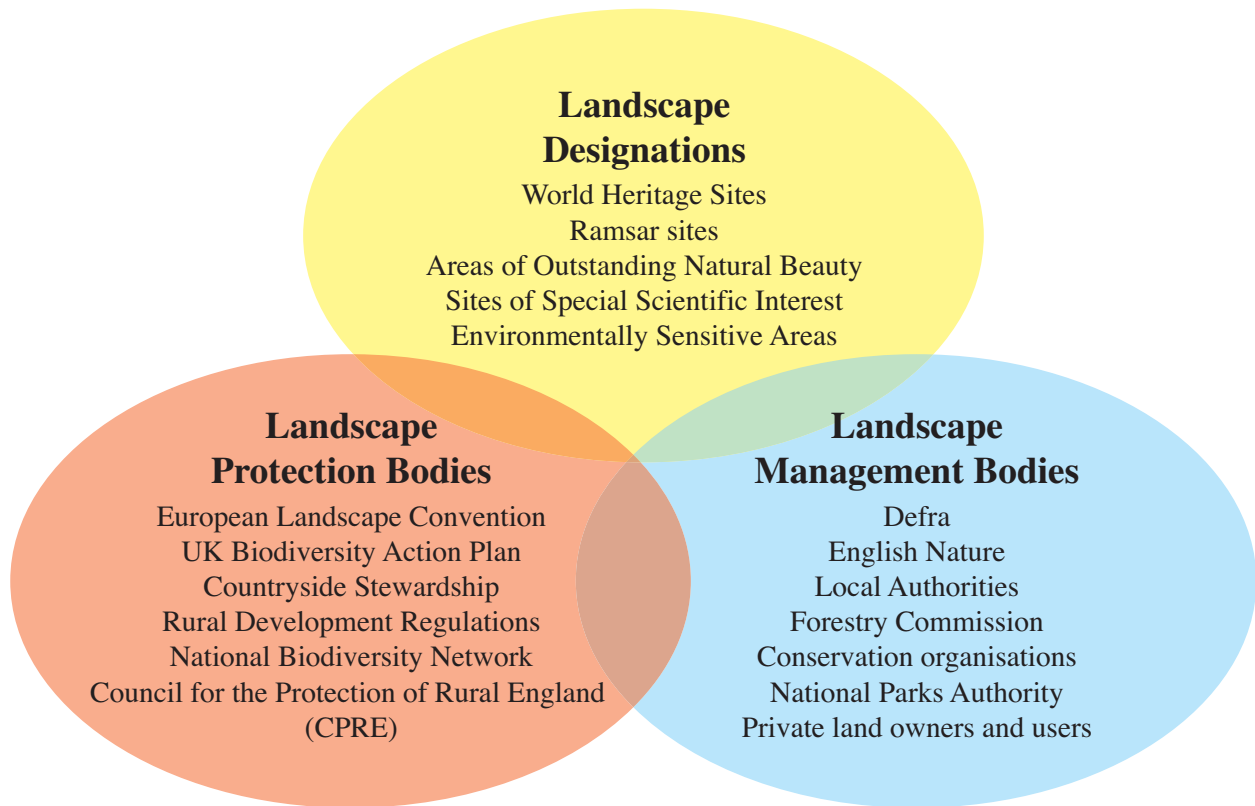


Fig. 23

Identify areas in your locality that have a protected status. How are they protected? What impact does this protection have on the landscape and people?

What is the difference between protection, preservation and conservation?

Damaged Landscapes: The Shape of Things to Come?

<http://www.cpre.org.uk/news/view/402> 14 June 2007

A depressing picture of damaging landscape change except where strong policies exist to protect the countryside: this is the verdict of CPRE on the publication of Natural England's report *Tracking Change in the Character of the English Landscape* published today.

'The acknowledgement that almost 40% of our landscapes are changing for the worse is a sad indictment of past decisions, but this is nothing by comparison with what awaits us unless we act now,' said Tom Oliver, Head of Rural Policy at CPRE.

'If 40% of our hospitals or schools were suffering from serious neglect or damaging change, people would rightly be alarmed and wanting answers. As it is, there are signs that the Government could make matters much worse for our treasured landscapes if its recent proposals on planning and development are carried through. Natural England's important survey shows how vulnerable the English countryside is to unfettered economic development and poorly sited major infrastructure,' Tom Oliver continued.

'Crucially, Natural England's survey also shows very clearly how to deal with this sorry tale of permanent loss. Where there are national and local policies which give the right importance to landscape, economic and social progress has been made without trashing our amazing and much loved countryside.'

The survey shows how much our rural landscapes depend on wise development decisions and the support of traditional agricultural practices which are so important in maintaining the diverse character of our countryside.

Worryingly, close inspection of the report shows that little or no evidence is available for large areas of English countryside. It would be rash to interpret a lack of evidence as a sign that all is well.

'This report is of great importance. It shows that we're at a turning point: do we let much of the countryside become a free fire zone for developers, whether they are building industrial sheds, roads, runways, wind farms or sprawling suburbs? Or do we take notice of the evidence that, if we want, we can have social and economic benefits without losing one of England's greatest assets, its fabulous countryside,' Tom Oliver concluded.

Case Study

As stated on the first page, you will need to prepare some case studies of particular landscapes. Consider all the points that have been made so far in the Resource Booklet, and apply them to your chosen landscapes. Decide what threatens your landscapes and how they could best be managed sustainably. You have been given two examples of how landscapes can be evaluated. You also need to identify the threats, recognise the conflicts and suggest a strategy for sustainable management.

A guide to using the resource booklet during the study period

You have several weeks in which to study the chosen issue, but you will probably already have undertaken some work on it in class. You will spend some of the study time working on your own, but it would be best if some of the activities listed below could be done as part of group discussions. There is no reason either why the group should not share the search for other resources.

Remember as you use these resources that many are not taken from textbooks. They come from original sources and are written in language suitable for a particular purpose – you might like to discuss that purpose to see if any bias is evident.

Suggestions for studying:

- To begin with, pick out the different sections of the booklet and skim read them to check that you have a good idea of what each is about. Start with Section A.
- Now read each section more carefully. Try to summarise in as few words as possible the key points in the text, tables or figures.
- List all the technical and geographical terms used. Make sure you understand the meaning of any ones new to you.
- Look out especially for those parts concerned with location, spatial patterns and people/environment interactions - the geography.
- Now try out some of these questions on the different parts of the booklet;
 - How are human activities affecting the physical environment?
 - What are the interactions between physical and human processes?
 - To what extent are the situations described sustainable or unsustainable? What solutions to the issue are proposed?
 - What solutions, or mix of management strategies, would best meet the criteria for sustainable development?
- Look at previous question papers, noting how the questions are phrased to encourage you to draw upon your whole understanding of geography and to use the resources selectively to illustrate your answers.
- Think about how your studies in other parts of your A level course, as well as in the Issues in Sustainable Development module, might contribute to your understanding of this issue.
- Extend your knowledge of this issue by finding out what is happening in your home area or a different context from that presented in the resource. You could also search for other sources. These may include texts, articles, websites and official reports.

Some starting points are given in the resources.

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