Green Belts: a greener future

A report by Natural England and the Campaign to Protect Rural England

Campaign to Protect Rural England

NATURAL ENGLAND

Green Belts: a greener future

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Established in 1926, Campaign to Protect Rural England is a charity that exists to promote the beauty, diversity and tranquillity of rural England. CPRE's 2026: Vision for the Countryside, sets out how we believe rural England should look in the year of our centenary. This research and the recommendations set out in this report will help realize our aspirations for the Green Belt.

Established by the Government in 2006, Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings. The evidence presented in this report is expected to support debate on how the Green Belt can deliver more positive benefits to the environment and to people.

Acknowledgements

CPRE and Natural England acknowledge contributions to this report from the following organisations:

TNS UK Ltd

Foreword

We have prepared this report to bring together fresh evidence and ideas to inform the debate on the future of England's Green Belt. The Green Belt covers nearly 13% of England, significant not only because of its extent, but because it provides both a breath of fresh air for the 30 million people living in or near to our largest towns and cities.

Green Belt land faces many challenges. It is expected to meet diverse and often conflicting needs, and attracts considerable scrutiny due to the planning controls which govern it and the urban pressures which it faces.

The original purpose of Green Belt is clear. It was introduced 60 years ago to protect the countryside from urban sprawl and to retain the character and vitality of cities. For this purpose, which remains fundamental, it has been highly effective. Subsequently, objectives for the use of land once designated as Green Belt were introduced to planning policy in 1995. These were set to provide recreation and attractive landscapes, to improve damaged and derelict land, to secure nature conservation and to retain farming and forestry. This report considers the extent to which Green Belt is currently meeting these positive objectives and also looks ahead at what the Green Belt could deliver in the future.

The report brings together, for the first time, information on the state of Green Belt land and compares this to other areas of England. We provide evidence that the 1.6 million hectares of Green Belt provide a rich and varied natural environment and many related benefits to society. The ecosystem services provided by Green Belt land are highly significant and have an economic value that is often underestimated or simply not understood. We conclude that these areas could take on an even greater significance in the face of climate change, England's growing population and the need for a low carbon economy. They can also help in creating a healthier society through providing space for active outdoor lifestyles and nutritious locally grown food.

Our call is for more ambition to enhance the benefits and services provided by Green Belt land so that we can be proud to pass it on to the next generation, and for all our major towns and cities to be surrounded by a recognizable and well maintained natural environment.

In the summary document accompanying this evidence report, we have identified opportunities to achieve this. We invite all those with an interest in the management of the land surrounding our urban areas to discuss these ideas with us and to work together to create Green Belts and urban fringes fit for the future.

Helen Phillips
Chief Executive, Natural England

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Chief Executive, CPRE

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Executive Summary

This joint report by Natural England and the Campaign to Protect Rural England (CPRE) presents evidence on the state of the land designated as Green Belt.

Our two organisations see a positive future for Green Belts as places which are rich in biodiversity and provide attractive landscapes which are appreciated and used more by the public. In other words, places around towns and cities with a healthy natural environment contributing positively to the ecosystem services required to support life.

Natural England has called for 'a refresh of Green Belt policy to see how it might evolve to fit twenty first century circumstances and deliver more positive benefits for the natural environment and people's enjoyment of it' [1].

CPRE's 2026 *Vision for the Countryside* sets out CPRE's desire for Green Belts to continue to fulfill their planning functions, but also to be 'more attractive and more accessible, providing an invaluable breathing space for town and city dwellers and supplying them with food' [2].

The report confirms that Green Belt policy has been highly effective in achieving what it was intended to do despite considerable development pressures in the last half a century. This was the conclusion of a major Government study in 1993[3] and the analysis commissioned for this study suggests that the conclusion is still valid. The countryside around, and between, the towns and cities protected by Green Belt has remained largely undeveloped, certainly compared to areas without Green Belt or other equivalent planning controls in place.

The positive role for Green Belt land was recognised by the Government in 1995 when the revised Planning Policy Guidance Note 2 (PPG2), specified that, once designated, Green Belts have a role to play in achieving positive land use objectives[4]. These objectives, six in total, are strictly secondary to the purposes of the Green Belt designation, relating to stopping urban sprawl. This report looks at the state of Green Belt land in terms of these positive land use objectives relating each of these to the ecosystem services they provide. It assesses whether more could be achieved to tackle the new challenges of climate change mitigation and adaptation. This has become increasingly important in recent years with the passing of the Climate Change Act 2008, and a new overall statutory purpose in the Planning Act 2008 for spatial planning to address climate change.

The concept of Green Belt also has strong support amongst the general public, even if they do not always understand the full details of the planning policy. In survey work carried out for this project[5], a majority

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1 Natural England, Policy on Housing Growth and Green Infrastructure, February 2008.

2 CPRE, 2026 Vision for the Countryside, May 2009, p.6.

3 Elson, M, 1993. The Effectiveness of Green Belt Policy, paragraph 1.1. (for Department for the Environment), HMSO.

4 The land use objectives for Green Belt are listed in Chapter 1.

5 Questions were asked during two weeks in July/August 2009 as part of the Natural England's omnibus survey on people and the natural environment.

(73%) of respondents both knew that Green Belts surround many major towns and cities, and valued Green Belts as places to enjoy quiet recreation, such as walking and cycling.

Nevertheless, the debate about whether or not to retain Green Belt designation as a planning policy persists. In recent years a number of organisations have issued a mixture of polemic and research on Green Belt. The strengths and weaknesses of this long standing planning mechanism have been rehearsed in well publicised debate which has been driven by pressures to find sufficient land to satisfy housing targets, particularly in the south east of England.

Quite separate from the debate about the location of housing growth, this report emphasises the need for multi-functional use of land, particularly in the face of climate change and population growth. 'Green infrastructure' within and around towns and cities has an important role to play. Green Belt is already making a contribution which could have even a greater significance in the future if it is managed effectively to maximise the benefits that a natural environment can deliver.

Green Infrastructure

A network of green spaces which provide life support functions including food, fibre, air to breathe, places for nature and places for recreation. The Green Infrastructure approach seeks to use regulatory or planning policy mechanisms to safeguard natural areas. Multi-functional green infrastructure refers to different functions or activities taking place on the same piece of land and at the same time. For example, a flood plain providing a repository for flood waters, grazing land, a nature reserve and a place for recreation.

The challenge is to find mechanisms and ways to invest in the land that realise its potential. This will involve working across public and private sectors, and across a range of disciplines. The summary document accompanying this evidence report takes this message forward and identifies opportunities to achieve a greener future for Green Belt.

Report structure and key findings

Chapter 1 Sets the purpose of the report and provides background to the planning legislation and policy for Green Belt.

Chapter 2 Summarises recent research and commentary on Green Belt and presents views expressed about the Green Belt by the public and by those who have a role in managing the land.

Chapter 3 Describes the characteristics of Green Belt land and compares this to other parts of England. It explores the dynamics of the Green Belt, in terms of development pressure and planning controls, and draws conclusions about the effectiveness of land designated as Green Belt in meeting its purpose to contain urban sprawl and the openness of land around the urban form.

Chapter 4 Reviews the contribution Green Belt land makes to the two Green Belt objectives relating to the provision of opportunities for accessing the countryside and for outdoor sport and recreation. While Green Belt land has a greater share of public rights of way, Country Parks and Local Nature Reserves, with the proximity to the urban population the report concludes that there is scope to do more to encourage outdoor education, recreation and sport close to where people live, in turn promoting healthy lives and opportunities to engage with the natural environment.

Chapter 5 Reviews the objectives for Green Belt relating to attractive landscapes and damaged and derelict land. The character of the Green Belt is varied but it is important to people. Using the National Character Area approach, 39% of the Green Belt has 'maintained' its established landscape quality. A significant proportion (36%) is 'diverging' from its established character. 18% of the land is categorised as 'neglected' – slightly less than for England as a whole (20%). A high proportion is subject to landscape scale regeneration, such as through the Community Forest programme.

Chapter 6 Reviews the state of nature conservation in the Green Belt. While there are slightly fewer nationally protected sites than for England, the state of the sites across all Green Belt land is similar to the national average. This conceals the fact, however, that some individual Green Belts have a significantly higher proportion of Sites of Special Scientific Interest in a less favourable condition. Some particular species of birds and butterflies are faring well within the Green Belt landscape which is less likely to suffer from over grazing and water pollution and agricultural run-off than other parts of rural England.

Chapter 7 Reviews the Green Belt objective relating to the retention of agriculture and forestry and related uses. It shows that the majority of Green Belt land is either woodland or in agricultural use but that a high proportion of undeveloped land in Green Belt is not registered as agricultural and is more likely to be extended gardens and horse paddocks. Green Belt land receives a lower proportion of agri-environment payment than would be expected for the area covered, and on average receives less payment per hectare, although there is a wide variation between the 14 Green Belt areas.

Chapter 8 Considers the new challenges relating to climate change and assesses whether Green Belt land has the ecological capacity to face these. It acknowledges the ecosystem services currently provided by Green Belt land and concludes that there is potential to do more to support a low carbon economy and to meet the challenges of climate change mitigation and adaptation.

Chapter 9 Concludes that the value of Green Belt land in an undeveloped state is significant and needs to be a powerful consideration in decisions about the future shape and form of urban development and how to tackle challenges of population growth and climate change. It calls for greater ambition for Green Belt land to deliver more benefits to people and to the environment.

Chapter 1

Introduction

Introduction

Purpose of this report

This report brings together current and new evidence and ideas to inform the ongoing debate on the future of land designated as Green Belt in England. It reviews the nature of Green Belt land and the benefits it currently delivers, before considering the contribution it makes to a wide range of ecosystem services and the role of Green Belt in tackling future challenges.

Ecosystem Services

Ecosystem services are the wide range of valuable benefits that a healthy natural environment provides for people, either directly or indirectly. The benefits range from the essentials for life, including clean air and water, food and fuel, to 'cultural' ecosystem services that improve our quality of life and wellbeing, such as recreation and beautiful landscapes. They also include natural processes, such as climate and flood regulation that we often take for granted.

Natural England has called for 'a refresh of Green Belt policy to see how it might evolve to fit twenty first century circumstances and deliver more positive benefits for the natural environment and people's enjoyment of it'.[6]

CPRE's 2026 *Vision for the Countryside* sets out CPRE's desire policy that Green Belts should continue to fulfil their planning functions, but also to be 'more attractive and more accessible, providing an invaluable breathing space for town and city dwellers and supplying them with food'[7].

This report provides an evidence base to inform the continuing work of both organisations.

History of the Green Belt

The concept of Green Belt was initially suggested in the late 19th century. In 1898, Ebenezer Howard's proposed Garden Cities were intended to be *"planned, self-contained, communities surrounded by greenbelts, containing carefully balanced areas of residences, industry, and agriculture"* [8]. In the 1930s CPRE campaigned for a clear barrier of undeveloped land against ribbon development and urban sprawl. As a result of these campaigns and other local initiatives, the first Green Belts were designated in London and Sheffield, the former assisted by an Act of Parliament in 1938. By 1955, Green Belts were firmly supported by both national planning legislation and policy. CPRE has continued to be involved in campaigning for Green Belt designation, and permanent protection, in many parts of the country.

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6 Natural England, Policy on Housing Growth and Green Infrastructure, February 2008.

7 CPRE, 2026 Vision for the Countryside, May 2009, p.6. CPRE's full policy on Green Belts is available from www.cpre.org.uk.

8 Sir Ebenezer Howard, 1898. To-morrow: a Peaceful Path to Real Reform, (reissued in 1902 as Garden Cities of To-morrow). Kessinger Publishing.

Figure 1 – Key dates in Green Belt history

1898	Garden City movement – Ebenezer Howard proposes Garden Cities surrounded by Green Belts.
1926	Formation of CPRE, one of whose earliest campaigns was against urban sprawl.
1935	First Green Belt proposed in an official planning policy by the Greater London Regional Planning Committee "to provide a reserve supply of public open space and of recreational areas and to establish a Green Belt or girdle of open space."
1938	Sheffield Green Belt designated by local government.
1938	Green Belt (London and Home Counties) Act.
1947	Town and Country Planning Act, allowed local authorities to control changes in the use of land from undeveloped to developed uses.
1955	Green Belt policy for England was set out in Ministry of Housing and Local Government Circular 42/55 which invited local planning authorities to consider the establishment of Green Belts in their area.
1959	Metropolitan Green Belt fully designated in local plans.
1986	Completion of M25 motorway, running largely through the Metropolitan Green Belt.
1988	Circular42/55 replaced with Planning Policy Guidance Note 2.
1995	PPG2 amended to add positive objectives for Green Belt land.
2001	Current version of PPG2 issued.

Professor Sir Peter Hall argues that the history of the Green Belt can be divided into three phases, the first being the designation of Green Belts in London and Sheffield by local authorities between 1935 and 1947, the second being those immediately following the Town & Country Planning Act 1947; and the third phase post-Green Belts since the 1960s, in which time the land area covered by them has expanded considerably[9].

The area covered by fully approved Green Belts has doubled since 1978[10], although much of this has been as a result of confirmation of details of the Green Belt boundaries that had been agreed in principle as early as the 1950s. In 2006 a large area of land in the South West Hampshire Green Belt was re-designated as the New Forest National Park. Both Natural England and CPRE welcomed this change in designation, as landscape protection became the overarching principle guiding future policies, and levering in more resources for sustainable land management and public access.

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[9] Hall P, 2007. Rethinking the Mark Three Green Belt. Town & Country Planning, August 2007, p.229.

[10] Elson, M, 1993. The Effectiveness of Green Belt Policy, paragraph 1.1. (for Department for the Environment), HMSO.

Green Belt policy

Government policy on Green Belts is contained in Planning Policy Guidance 2 (PPG2) which is the current responsibility of the Department for Communities and Local Government (CLG). The five purposes of Green Belts, set out in PPG2, are:

- to check the unrestricted sprawl of large built up areas;
- to prevent neighbouring towns from merging with one another;
- to assist in safeguarding the countryside from encroachment;
- to preserve the setting and special character of historic towns; and
- to assist with urban regeneration, by encouraging the recycling of derelict and other urban land.

The policy in PPG2 clearly states that the most important attributes of Green Belts are their openness and permanence. Local authorities must have regard to Green Belt policy in preparing spatial plans and the policy in PPG2 can also be a material consideration in reaching decisions on individual planning applications and appeals.

The area covered by Green Belt is set through strategic level planning. Since 2004 this planning has been done through the Regional Spatial Strategies with detailed boundaries fixed by Local Development Frameworks. Any changes have to be justified to the Secretary of State who will need to be convinced that exceptional circumstances exist and alternatives have been considered. Permanence means that Green Belt boundaries should endure for longer than the life of a development plan and not be reviewed every time a local or strategic development plan is reviewed. A record of change is maintained by CLG[11].

Development within Green Belts is strictly controlled and there is a general presumption against inappropriate development. Development considered appropriate includes: some mineral extraction; small-scale infill development within villages; the extension/re-use of existing buildings; and development strictly required in connection with agriculture, forestry and outdoor sport and recreation. Where any large-scale development or redevelopment of land occurs, including mineral extraction, landfill, road proposals, or high voltage electricity pylons this is often off-set by contributing towards Green Belt land use objectives or adding to the Green Belt boundary in another location.

Land use objectives for Green Belt

The most recent version of PPG2 (1995), officially recognised for the first time that Green Belts can contribute to other land use goals beyond their purposes. PPG2 states that these additional objectives are not a factor in the designation or continued protection of Green Belt land. This is for two principal reasons: (i) because to make them so would be an active incentive for landowners who wanted to develop their land, to let the quality of the land deteriorate and (ii) they would provide a justification for development to enable improvement which would often contradict the primary purposes and the presumption against most forms of new development. Whilst, therefore, Green Belts should not be designated to take account of these, once designated Green Belts can contribute to the following objectives:

- to provide opportunities for access to the open countryside for the urban population;

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[11] Local Planning Authority Green Belt Statistics: England 2008/09
www.communities.gov.uk/publications/corporate/statistics/lagreenbelt2008

- to provide opportunities for outdoor sport and outdoor recreation near urban areas;
- to retain attractive landscapes, and enhance landscapes, near to where people live;
- to improve damaged and derelict land around towns;
- to secure nature conservation interest; and
- to retain land in agriculture, forestry and related uses.

Although not added to Green Belt policy until the mid 1990s, the idea that Green Belt land should provide public benefits has its roots in Ebenezer Howard's ideas at the beginning of the 20th century and in the 1938 London Green Belt Act. These objectives encourage a positive approach to the use of the land protected from urban sprawl, as well as providing a sense of the greater value and benefits that Green Belt land, once designated, can provide to society.

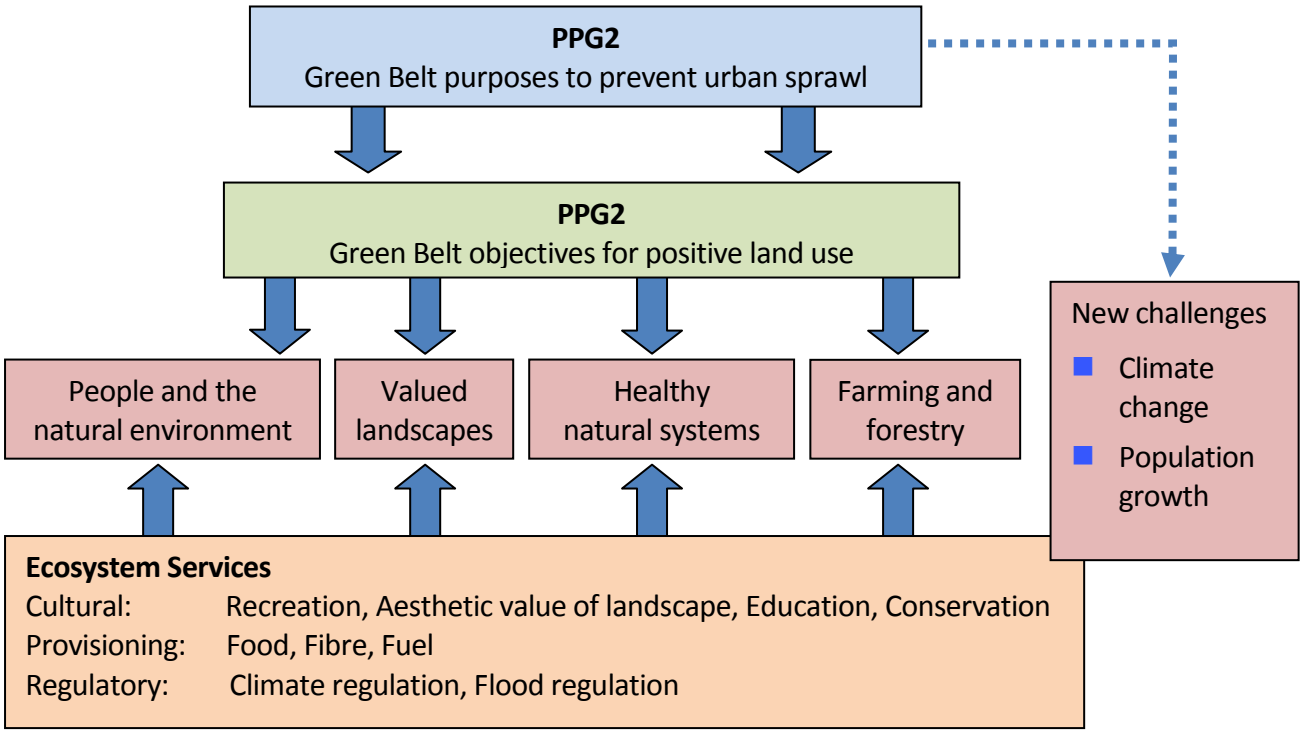
This report examines the potential of the land use objectives, to see how Green Belt land can contribute positively beyond its original purpose. As Figure 2 shows, fulfilling these objectives can play an important role in delivering a range of environmental benefits, and all of these are supported by a range of ecosystem services.

Chapters 4 to 7 review the evidence relating to the objectives for Green Belt in four sections:

- People and the natural environment.
- Valued landscapes.
- Healthy natural systems.
- Thriving farming and forestry.

New challenges for Green Belt land are assessed in Chapter 8.

Figure 2 – Green Belts and Ecosystem Services are mutually reinforcing



Methods used

Land cover and land use data has been analysed to describe and review the use of Green Belt land. In addition, local and national questionnaire surveys have been used to seek the views of stakeholders and the public. More detail on the methodology used is in Annex 1. This explains the way the area of Green Belt land was calculated using 2006 data. The area of Green Belt used for this study is 1,619,835 hectares (12.4% of England)[12]. The current area of Green Belt is nearly 13% of England with the majority of the difference explained by improved mapping.

Throughout the report we have compared Green Belt land with England as a whole, and also with other similar urban fringe areas which we have called 'Comparator Areas' (see definition below)[13]. The areas cover a further 10% of England, and they face many of the same challenges and opportunities as Green Belt land due to their proximity to major urban areas. Figure 3 shows the location of Green Belts in England.

Comparator Areas

In this review land designated as Green Belt has been compared with urban fringe areas which are not subject to Green Belt planning controls. The Comparator Areas were devised by drawing 5 km zones around all major towns and cities with population in excess of 100,000. All of the area that was not designated as Green Belt was combined. This included the area around 17 towns and cities with no Green Belt, as well as the areas of land not designated around towns and cities partly surrounded by Green Belt. Figure 3 illustrates this.

Using this approach, the area covered by Green Belt in 2006 was 1,619,835 hectares or 12.4% of England at mean high water (13,050,388). The area covered by the Comparator Areas was 1,325,870 which is 10% of England at mean high water.

Throughout the remainder of the report the term Comparator Areas is used to describe these non-Green Belt urban fringe zones.

[12] There is a variance of 1.1% between this figure and the official total area recorded for 2008 by CLG, which is 1,638,288 hectares (12.6% of England).

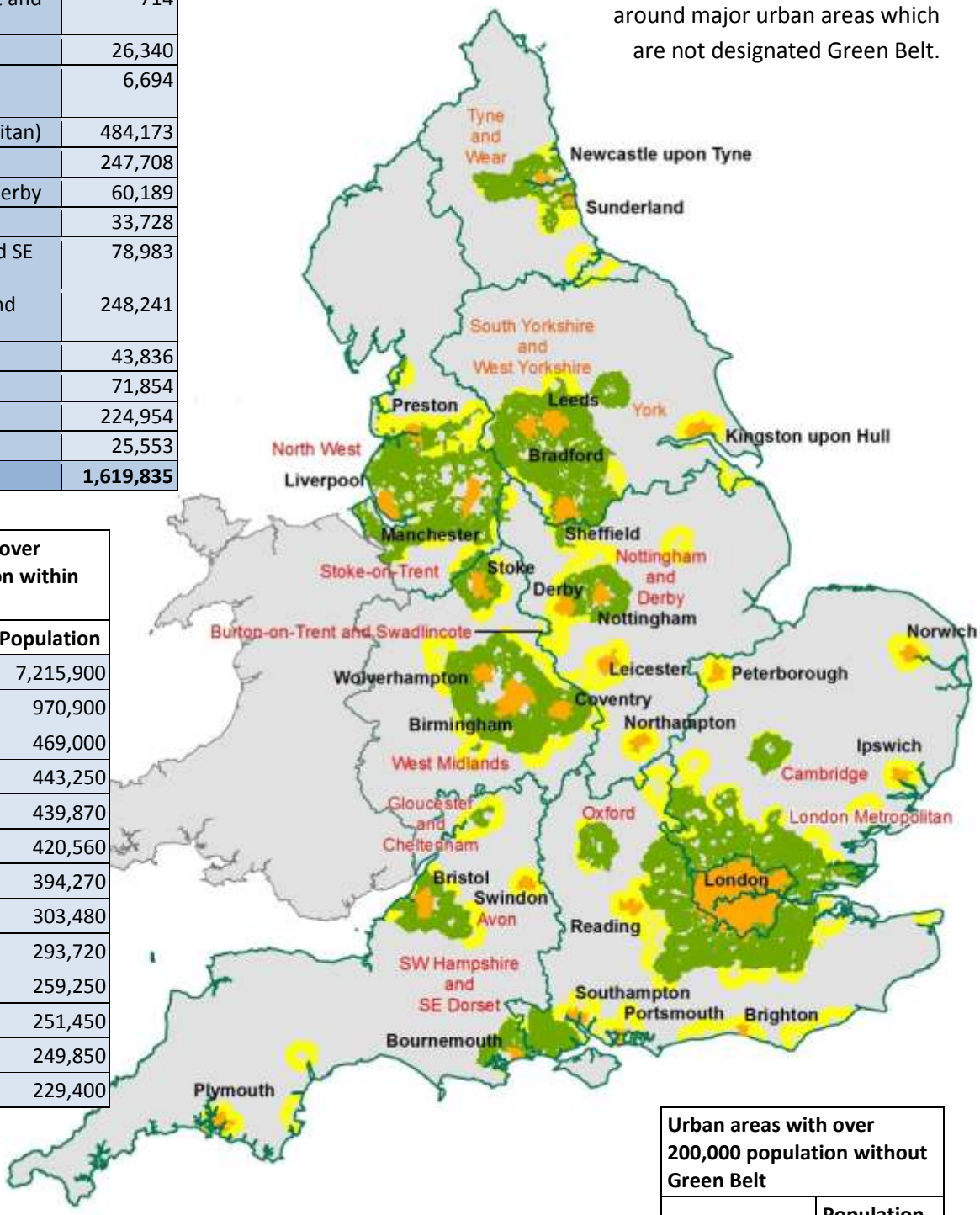
[13] Exceptions to this are: the analysis of indicator species in Chapter 6 where data for Green Belt and Comparator Areas has been set against data for Lowland England rather than England as a whole; and data on derelict and vacant previously developed land, which has been provided according to the eight Government Office Regions.

Figure 3 – Map of Green Belt and major urban areas in England

Green Belt areas are based on 2006 data and digitised to a hectare square grid.

Comparator Areas are 5 km zones around major urban areas which are not designated Green Belt.

Green Belt	Area (ha)
Avon	66,868
Burton upon Trent and Swadlincote	714
Cambridge	26,340
Gloucester and Cheltenham	6,694
London (Metropolitan)	484,173
North West	247,708
Nottingham and Derby	60,189
Oxford	33,728
SW Hampshire and SE Dorset	78,983
South Yorkshire and West Yorkshire	248,241
Stoke-on-Trent	43,836
Tyne and Wear	71,854
West Midlands	224,954
York	25,553
Total	**1,619,835**



Urban areas with over 200,000 population within Green Belt	
	Population
London	7,215,900
Birmingham	970,900
Liverpool	469,000
Leeds	443,250
Sheffield	439,870
Bristol	420,560
Manchester	394,270
Coventry	303,480
Bradford	293,720
Stoke-on-Trent	259,250
Wolverhampton	251,450
Nottingham	249,850
Derby	229,400

Urban areas with over 200,000 population without Green Belt	
	Population
Leicester	303,580
Kingston upon Hull	301,420
Plymouth	243,800
Southampton	234,250
Reading	232,660

National Water Sports Centre, Holme Pierrepont in the Nottingham Green Belt.

Brockley Hill, near Stanmore
© Henrietta Williams

Chapter 2

The Green Belt debate

The Green Belt debate

Research and comment on Green Belt

The core principles of Green Belt policy in England have remained relatively intact for over 60 years. This is despite serious challenges from a wide range of professional bodies, academics, and politicians, and pressures from developers and investors.

At the turn of the century several organisations sought further debate and put forward proposals for modernising the Green Belt[14]. The debate over Green Belt policy tends to fall into two categories:

- **Its effectiveness as a planning mechanism** – does Green Belt, as a planning designation, support sustainability by encouraging urban regeneration and concentration of homes, services and employment opportunities; or does it prevent sufficient homes being built, encourage 'cramming' of new housing into large urban areas and artificially inflate prices leading to unaffordable housing and leapfrog development beyond the Green Belt boundaries? Are other tools, such as strategic gaps and green wedges, more effective at creating a sustainable urban form? Should there be more flexibility in terms of permitted development, and the permanence of the designation?
- **Its role in environmental management** – does the Green Belt designation impact on the management of land in the urban fringe? Have the land use objectives for Green Belt land encouraged positive land management? What are the best ways of preventing degradation of land in the urban fringe and maximising productivity of the land, and the benefits to people?

The final report of the Government-commissioned Barker review of Land Use Planning[15] stated that 'the key principles of Green Belt policy remain valid'. However, the report also echoed many of the criticisms of Green Belts. Barker's Recommendation 9 called for:

- regional and local reviews of Green Belt boundaries;
- a more positive approach towards applications that would enhance the Green Belt and other surrounding areas; and
- a review of the merits of different models of protecting valued open space, including the 'green wedge' approach.

The review referred to the view that Green Belts promote 'leap-frogging' of development from the large cities they surround to more dispersed locations, thereby increasing commuting times to major cities and exacerbating problems such as increased greenhouse gas emissions. Some have pointed to locations such as Peasedown St.John, near Bath, or Bishop's Cleeve, near Cheltenham, as examples, and suggest that urban extensions to large towns and cities are the preferred way to avoid this. This thinking appears to have influenced the Panel that in 2007 examined the draft Regional Spatial Strategy for the South West. The Panel referred to the argument that concerns about climate change made Green Belt policy outdated as a means for bringing about sustainable urban growth[16]. An alternative view is that Green

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[14] Summarised for the Countryside Agency in 'Urban fringe – Policy, Regulatory and Literature Research. Report 2.3: Green Belts, Bartlett School of Planning, University College London (2003)

[15] Barker K, Review of Land Use Planning – Final Report, December 2006, paragraph 2.38.

[16] South West Regional Spatial Strategy (RSS) Examination in Public Panel Report, January 2008, particularly paragraphs 4.0. 31 and 4.0.33. Downloaded from www.southwesteip.co.uk/downloads/FinalSouthwestEiP.pdf on 7 Oct 2009.

Belt not only encourages regeneration both within the urban areas it contains and in areas in need of regeneration outside the principal urban areas, but also reduces energy consumption, thereby helping to tackle climate change. There is also a strong argument that the historic cities that have Green Belts need to have a firm limit set on their boundaries in order to protect qualities of intrinsic importance, such as their historic setting. The relationship of Green Belts to two English World Heritage Sites is explored in more detail below.

The Urban Task Force in 1998 noted a proven link between urban residential housing densities and energy consumption, calling for higher density, more compact development on previously developed land as a means of reducing consumption[17]. The recommendations of the Task Force have played an important role in ensuring that the vast majority of new housing (78% in 2008) is built on previously developed land and at progressively higher densities each year since 1999. This poses urban design challenges, particularly for ensuring adequate provision of local accessible greenspace to support health and quality of life, but has promoted urban regeneration – reinforcing one of the five purposes of Green Belts.

Professor Martin Elson argues that Green Belts were not originally envisaged as merely stopping development, but guiding it to particular locations, in order to shape the expansion of a city on a regional scale[18]. As part of such a wider strategy, dispersal of new development to towns beyond the Green Belt need not lead to increased carbon emissions from commuting if it is accompanied by supporting infrastructure for employment, public transport, walking and cycling. 'Leap-frogging' may also be affected by personal choice, with people choosing to live in a small town or more rural location regardless of whether major housing provision is made on Green Belt land or urban fringe. This occurred in the 1950s when people from London 'leap-frogged' over the new town of Crawley to places such as Burgess Hill.

Local approaches to urban fringe development

Some large towns and cities have no Green Belt designation (Figure 3) and a number of local authorities in these areas use a range of non-statutory designations relating to landscape protection, nature conservation, and historic sites to maintain gaps between settlements and to shape the form of settlements. These designations go under a variety of names such as "green wedges", "strategic gaps", and "rural buffers" and within these areas controls on development can be as restrictive as for designated Green Belt. They are considered to have greater flexibility than Green Belt designation to respond to the new demands for sustainable development as they are not permanent and are subject to review each time a development plan is revised. In consequence, the designations themselves have often not endured, or have failed to protect significant areas of land from sprawl. In places such as Basingstoke and Wokingham, for example, there has been a gradual reduction over time in the area of the 'strategic gaps'. Evidence from Europe also suggests such policies are less effective than Green Belt designation, for example the Dutch 'Green Heart' and in Frankfurt-am-Main in Germany where 'green wedge' policies have been used[19].

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[17] Urban Task Force 1999, Towards an Urban Renaissance, p.36 & 38.

[18] Elson M, The Effectiveness of Green Belts, HMSO 1994, paragraph 2.2.

[19] See accounts provided by German planner Jens Scheller of the Frankfurt-am-Main GruenGuertel (green girdle) quoted in Surrey County Council / Purple Conference: Greening the Green Belt – Proceedings of conference at Sandown Park, Esher, Surrey, 5 – 7 October 2005, p.36; and of the Netherlands Green Heart by Michel Van Eeten and Emery Roe, 'When Fiction Conveys Truth and Authority: The Netherlands Green Heart Controversy', Journal of the American Planning Association, 66 (1) Winter 2000, p.58 at 60-61.

The Government reviewed local designations, such as green wedges in 2003 as part of the review of Planning Policy Guidance 7. As a result the revised Planning Policy Statement 7 strongly discourages the creation of new non-statutory designations, which are seen as additional and unnecessary brakes on development[20].

Research presented in Chapter 3 shows that significantly more development takes place around major towns and cities without a Green Belt than those with one, demonstrating that Green Belt remains the most effective mechanism for preventing urban sprawl.

A global perspective

The majority of the world's population now live in cities for the first time in recorded history. The United Nations Human Settlements Programme has identified uncontrolled urban sprawl as one of the biggest challenges facing the world today, particularly developing countries. It encourages the 'compact city' model of urban growth to address the issue and to reduce greenhouse gas emissions caused by additional commuting associated with urban sprawl[21]. 'Compact cities' are commonly characterised by policies like Green Belts to set a clear boundary to urban growth in order to protect natural resources beyond the city boundary. Similarly, at the European level, the European Commission has identified urban sprawl as one of the most urgent of today's urban planning and design issues[22]. The Commission has also found that 'sprawl is generally greater around the largest urban areas (over 500,000 inhabitants) with housing and industrial or commercial uses the dominant new land uses'[23]. These are precisely the areas which, in England but not in many other European countries, are protected from sprawl by Green Belt policy. Comparison of rates of development on undeveloped land in England and the USA find that the rate of change to development is almost 100 times greater in the USA than England, notwithstanding that the USA has a population (around 300 million) at around six times greater than that of England[24].

Green Belts are regarded as a British success story. They have been established in a growing number of countries across the world, from China, India and Korea to Canada and the USA, with similar forms (if not always policy substance) to the British model[25].

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[20] Office of the Deputy Prime Minister (ODPM), Planning Policy Statement 7: Sustainable Development in Rural Areas (PPS7), 2004, paragraphs 24-25.

[21] United Nations Human Settlements Programme (UN Habitat), Planning Sustainable Cities: Global Report on Human Settlements October 2009, p.213. Summary available from www.unhabitat.org.

[22] Commission of the European Communities, Towards a Thematic Strategy on the Urban Environment. COM(2004)60 Final, 2004, p.25

[23] Commission of the European Communities, Commission Staff Working Document Annex To The Communication From The Commission To The Council And The European Parliament On Thematic Strategy On The Urban Environment Impact Assessment, SEC (2006) 16, p.36. Downloaded from http://ec.europa.eu/environment/urban/pdf/sec_2006_16_en.pdf on 3 November 2009.

[24] According to official statistics quoted by the United Nations Environment Programme in 2007, between 1997 and 2001 approximately 29,000 square kilometres (2,900,000 hectares, or 11,740 square miles) of undeveloped agricultural or forestry land in the USA was developed. In the same period, only 314 square kilometres of undeveloped land in England was developed, and in turn only approximately 5% of this undeveloped land was in the designated Green Belt. Also, the proportion of all new development that has taken place in the Green Belt has consistently fallen to between 6 and 8% in four out of the six years since 2001 for which statistics are available (Department for Communities and Local Government, Land Use Change Statistics, Live Tables 244 and 261).

[25] See Tang, B; Wong, S; and Lee, A: 'Green Belt in a compact city: A zone for conservation or transition?', Landscape and Urban Planning 79 (2007), p.358.

The value of another Green Belt purpose – protecting the setting of historic towns – has also been recognised in international fora. UNESCO[26] has designated a number of World Heritage Sites across the country in recent years. Green Belt protection played a significant role in bringing about the designation of Bath as a World Heritage Site in 1987. One of the reasons for World Heritage Site designation is Bath's historic landscape setting, which since 1966 has been maintained by Green Belt as well as, in more recent years, Conservation Area and Area of Outstanding Natural Beauty policies. The local planning authority has also identified the Green Belt as playing an important continuing role in the future management of the World Heritage Site[27]. Additionally, Green Belt land forms part of the buffer zone designated to protect views of the World Heritage Site of Saltaire, the nineteenth century planned town near Bradford in West Yorkshire, although landscape setting is not a primary reason for the designation in this case. This World Heritage Site was designated in 2001[28], with the nearby Green Belt having been in place since 1980.

The public perspective

Green Belt is often associated in the public mind as a place designated for its natural beauty or as a place where nature is protected. The planning purposes of Green Belt, such as preventing urban sprawl, are not always well understood.

In the surveys carried out for this research, a number of questions sought to establish the level of public awareness and understanding of Green Belt[29] (Figure 4).

Overall, around three-quarters (73%) of the adult population in England are aware that the countryside around many of England's large towns and cities is called Green Belt.

As the chart illustrates, awareness increases with age from less than a third of those aged under 25 to 90% of those aged 55 or over. Awareness is also significantly higher amongst those in the AB socio-economic groups (89%) and those in white ethnic groups (79%).

In addition to the national survey, local surveys around the North West (Merseyside), Avon and Metropolitan Green Belts were also undertaken with communities living in close proximity to Green Belt land. Overall, 95% of those questioned were aware that the countryside around their communities was 'Green Belt', but there was a notably lower awareness (84%) in Merseyside.

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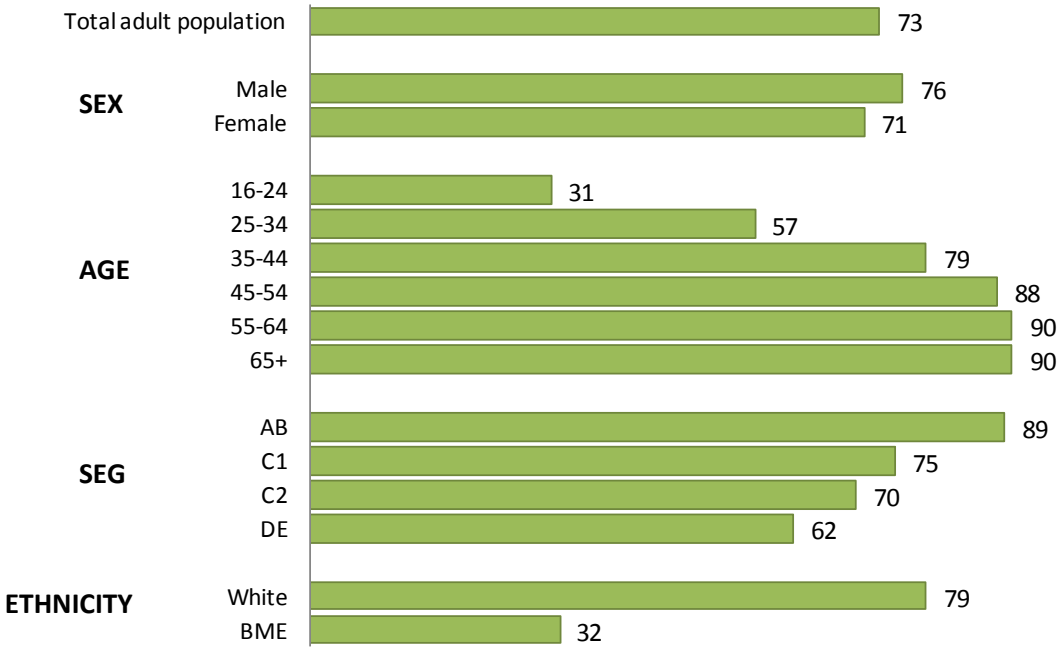
[26] The United Nations Educational, Scientific and Cultural Organisation.

[27] Bath and North East Somerset Council, City of Bath World Heritage Site Management Plan, September 2004, Appendix 5 – Planning & Policy Framework, paragraph 18. Accessed from www.bathnes.gov.uk on 16 December 2009.

[28] Atkins, Saltaire World Heritage Site Environmental Capacity Study, July 2005, paragraph 3.19. Accessed from www.bradford.gov.uk on 16 December 2009.

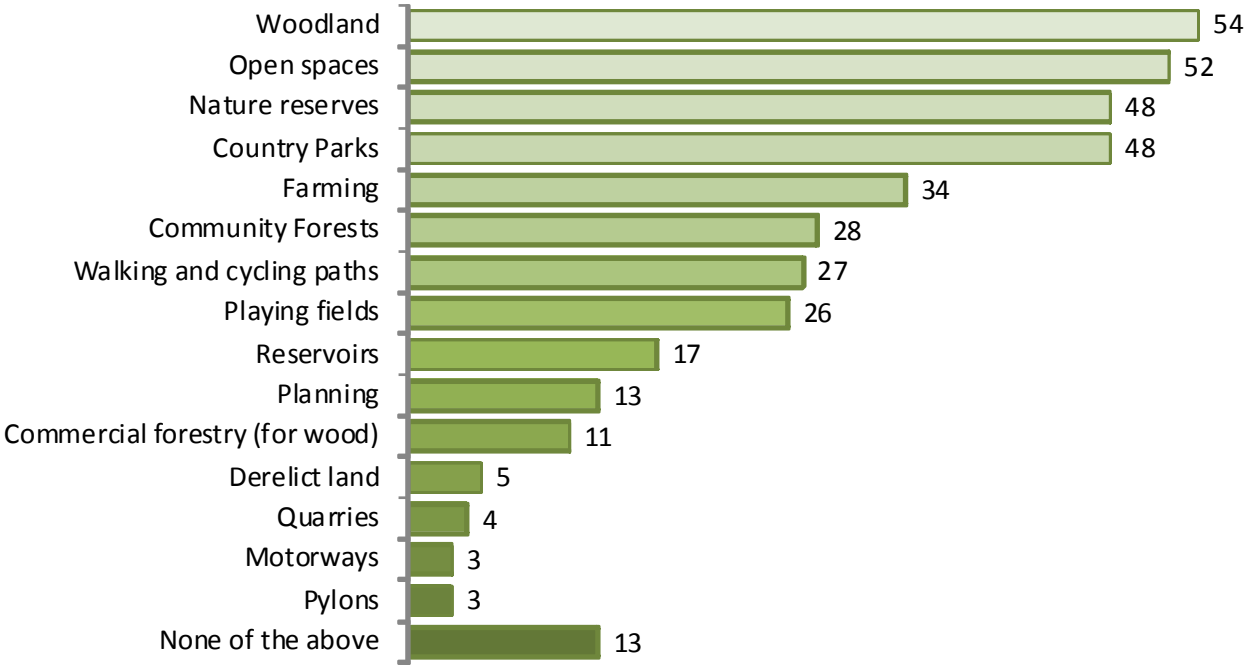
[29] Natural England omnibus survey on people and the natural environment. Questions on Green Belt were asked over a two week period in July/August 2009.

Figure 4 – Public awareness of Green Belt land



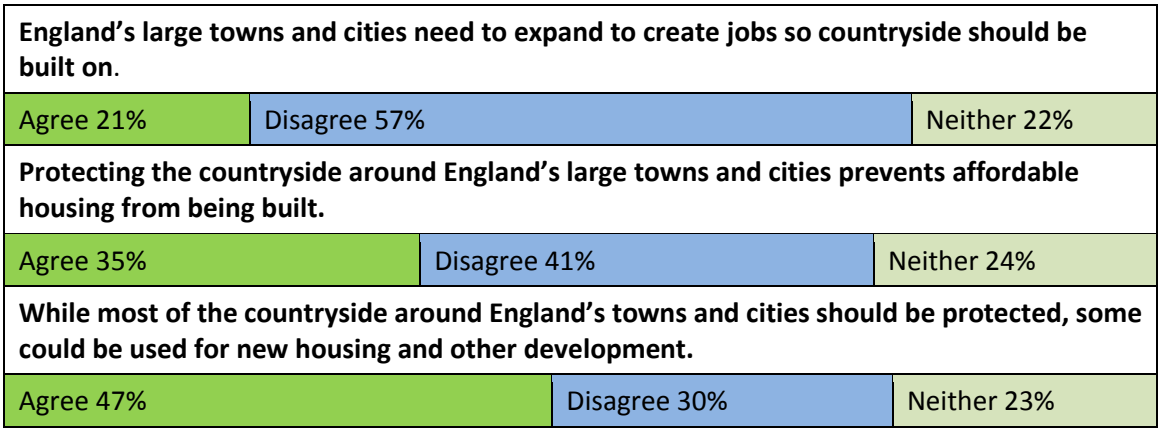
The national survey also asked respondents what things they associated with the words 'Green Belt'. When asked which of a set list of words came to mind when they heard the words Green Belt, around half of respondents selected woodland (54%) while a similar proportion selected open spaces (52%). Other frequently selected words were nature reserves (48%) and Country Parks (48%) while the more negative answer options were selected by much smaller proportions of respondents (Figure 5).

Figure 5 – Public associations with the words 'Green Belt'



The surveys show that, on the whole, public awareness of the Green Belt is high, however, when questioned on potential development on the Green Belt, the survey results suggest that public views are variable. Respondents were asked to agree or disagree with three statements on this issue (Figure 6).The responses suggest that while there is public support for Green Belt policy, and that this strongly relates to its protective function, there is also the recognition that some development may be necessary.

Figure 6 – Responses to statements about need to develop undeveloped land

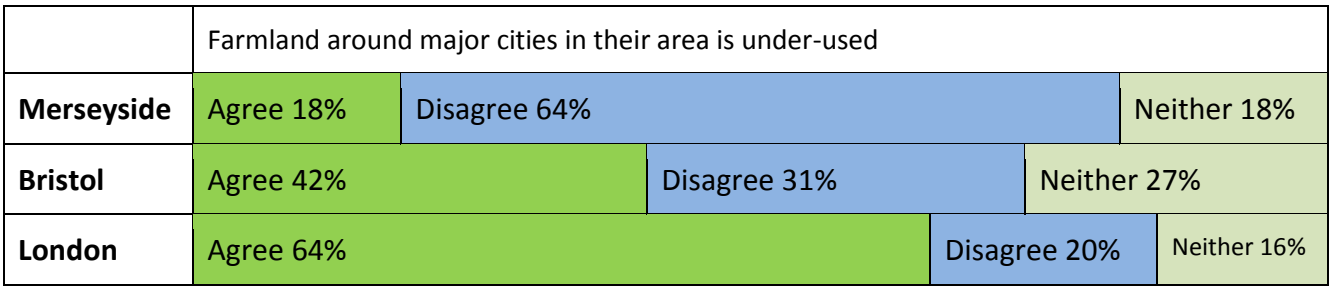


Land manager and professional views

A view often found in academia and the professions is that Green Belt is neglected and its condition has suffered as a result of both its close proximity to the urban environment and the presence of strong controls over most forms of new development[30]. On the contrary, it could also be argued that the forms of new development that have been allowed, particularly infrastructure development such as pylons or quarries, have actively contributed to this feeling of damage. In this view, Green Belt is generally uninspiring or unremarkable and is characterised as derelict and underused land given over to horse grazing or containing 'bad neighbour' development such as motorways, pylons or quarries.

In the local surveys for this report, landowners and professionals were asked to agree or disagree with the statement that farmland around major cities in their area is under-used. The response suggests that although neglect appears to be an issue, this varies greatly in different locations and circumstances (Figure 7). The issue of landscape 'neglect' in the Green Belt is considered further in Chapter 5.

Figure 7 – Landowner and professional views on whether Green Belt land is under used



[30] J. Andersson, N. Gallent, R. Oades and M. Shoard, 'Urban Fringe – Policy, Regulatory and Literature Research. Report 2.3: Green Belts', Bartlett School of Planning Report for the Countryside Agency, June 2003, p. 13.

A number of land managers and professionals interviewed directly or surveyed for this project raised concerns about the ability to diversify economic activity. Land professionals generally also associated Green Belts much more with 'planning' (responses ranged between 72-91% in the three survey areas) compared to the general public (a range of 13-34% of responses). Other evidence suggests a much more complicated picture in relation to the presence of rural diversification activities in the Green Belt (see Section 7, Farming and woodland).

Lambourne End Outdoor Centre.
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Chapter 3

The characteristics of Green Belt land

The characteristics of Green Belt land

Introduction

This chapter describes the characteristics of Green Belt land and compares this to other parts of England. It explores the dynamics of Green Belt in terms of development pressure and planning controls and asks whether the purposes of Green Belt policy are being achieved.

Quantity and location of Green Belt

There are 14 separate Green Belts varying in size from London (Metropolitan) at 486,000 hectares to Burton-upon-Trent and Swadlincote at just 700 hectares. In total, they cover just over 1.6 million ha or nearly13% of the land area of England. Within the 14 Green Belts there are 38 major towns and cities with populations of over 100,000 and in total around 30 million people[31] or 60% of the population live in the towns and cities surrounded by Green Belt. Most Green Belt land is on the 'urban fringe' or the edge of conurbations and extends into the deeper countryside. In a number of cases, however, Green Belt land also forms a wedge of undeveloped land linking the urban fringe to more inner city areas, as is seen in places such as Manchester and the West Midlands. For example, over 33% of the land area of Walsall, an inner part of the West Midlands conurbation, is designated as Green Belt.

There are 17 major towns and cities without Green Belt including Leicester, Kingston-upon-Hull, Reading, Peterborough, Plymouth, Blackpool and Brighton. The location and a full list of Green Belts can be seen in Figure 3.

Land cover

The characteristics of Green Belt land vary considerably as would be expected of such a large area of land. The environment Land Cover Map 2000[32] illustrates this variation in character (Table 1). The area of land cover type nationally is generally mirrored by the area of land cover type in the Green Belt (Figure 8).

When comparing individual Green Belts more distinctive differences are apparent. For example, arable and horticultural land covers 74% of Cambridge Green Belt but only 17% of Stoke on Trent which has the highest proportion of improved grassland. Both the London (Metropolitan) and SW Hampshire and SE Dorset Green Belts have higher than average mixed woodland. The latter is in part due, however, to the inclusion of the New Forest in this data which has now been designated as a National Park and no longer designated as Green Belt.

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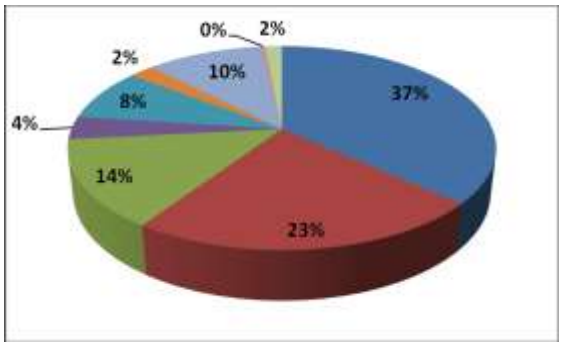
[31] Total population in urban settlements within the Green Belt boundaries. ODPM's 2001 Urban Settlement data cover England and Wales corresponding to the 2001 Census data. Urban settlements were defined as areas of built up land with an associated population of 1,000 and a minimum area of 20 hectares. Settlements separated by less than 200 metres were linked. The settlements were extracted from the Ordnance Survey 1:10,000 scale maps, as at 1st April 2001.

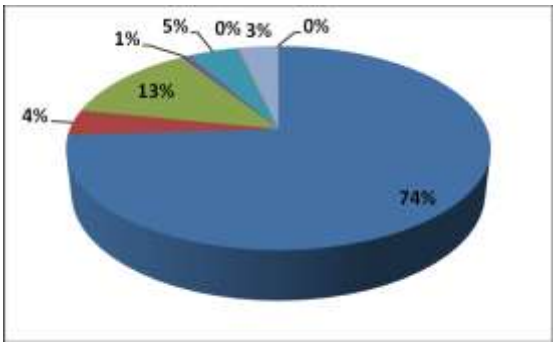
[32] Centre for Ecology and Hydrology, 2000

Figure 8 – Land Cover of Green Belt, Comparator Area and All England

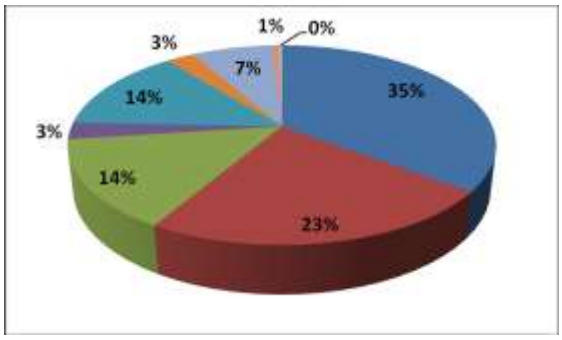
All England



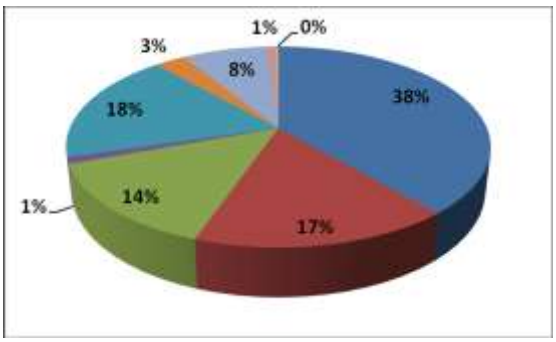
Cambridge



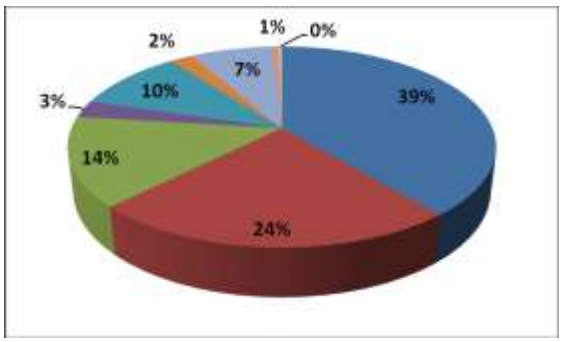
All Green Belt



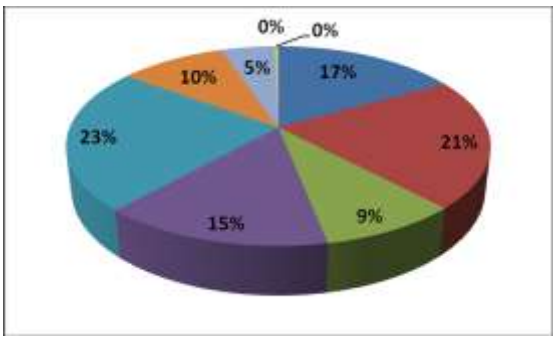
London (Metropolitan)



Comparator Area



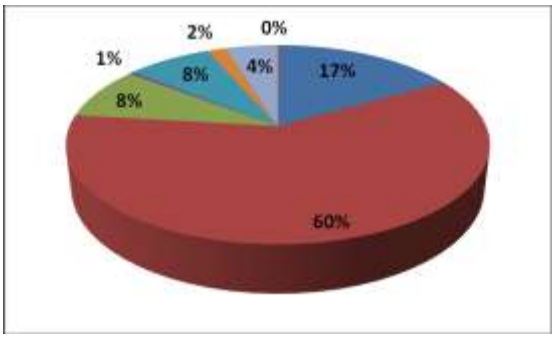
SW Hampshire and SE Dorset



KEY

- Arable and horticulture
- Improved grassland
- Semi-natural Grass
- Mountain, heath, bog
- Broad leaved / mixed woodland
- Coniferous woodland
- Built up areas and gardens
- Standing open water
- Coastal

Stoke-on-Trent



Perhaps most strikingly, compared with 10% in England as a whole, 7% of both the Green Belt and the Comparator Areas are taken up by 'built up areas and gardens', meaning land that has been developed and the gardens that adjoin it (Table 1b).

Where land is undeveloped it is the underlying character of the countryside in the area, not the designation itself that is responsible for the land cover present. For example, the high percentage of horticultural and arable cover in the Cambridge Green Belt is the result of the predominantly arable character of the East of England. A similar situation exists for woodland in the south east of England and hence the greater coverage of woodland in the London (Metropolitan) Green Belt. Green Belts in England are not designated on the basis of the type of land they happen to cover and there is no causal relationship to the underlying character of the countryside or the farming practices that are used in the designated area. What Green Belt policy does influence is whether land is either developed or undeveloped.

Land use

Land use in the Green Belt is influenced by the planning designation and has resulted in mainly undeveloped land with a rural character. Although much of the land is undeveloped, a quarter of this is not registered for agricultural use nor is it woodland. This land is made up of such uses as small paddocks, small holdings and extensive gardens. It accounts for 23% of Green Belt land compared to 14% for England (Table 2).

Development in the Green Belt

Green Belt policy has proven very effective at directing the location of development. Built development (both new build and re-building) has been largely concentrated within existing urban boundaries. This is demonstrated by comparing the rate and character of development between urban areas, areas subject to Green Belt controls and Comparator Areas. Between 1985 and 2006, 10.3% of the area classed as urban in 2001[33] was developed or re-developed compared to just 1.4% of Green Belt land and 2.2% of the Comparator Area (Table 3a).

During the same period, the percentage of undeveloped land which had been converted to developed use was 1.5% within urban areas and 1% for all England compared to 0.9% in the Green Belt and 1.4% in the Comparator Area (Figure 9). The result has been that the density of buildings in urban areas has increased as more buildings are added into existing urban areas.

This does not mean that there has been no built development in the Green Belt. It does mean, though, that it has been minimal. The latest statistics produced by Communities and Local Government (CLG) show that approximately 200,000 new dwellings were built in 2007 with 2% in the designated Green Belt, and 22% of these (or 0.4% of the total number of dwellings) were built on the previously undeveloped land[34] in the Green Belt. By comparison, 14% of all new dwellings were built on agricultural land across England and 77% of all new dwellings were built on previously developed land. This is consistent with trends in previous years.

Residential development in the Green Belt has a very particular character. Although a limited number of urban extensions have occurred, more typically there have been a number of very small scale and widely

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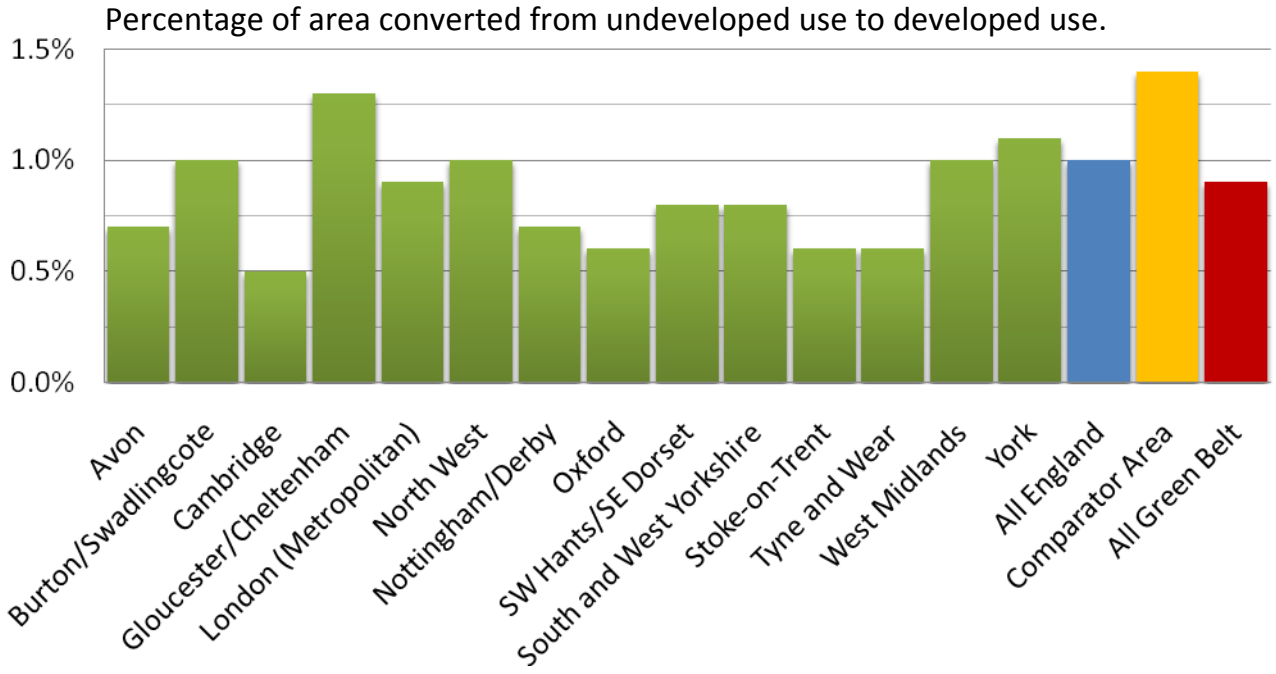
[33] This data relates to land within physical urban areas on their 2001 definition. Urban Areas are defined as those mapped and published by ODPM / OS in 2001.

[34] In planning terms previously undeveloped land means land previously in agricultural or forestry use. Approximately 7% of Green Belt is counted as 'previously developed'.

scattered developments which generally reflect the distribution of existing property such as farmsteads and clusters of cottages. The development involves construction of new dwellings adjoining existing ones and related forms of intensification such as conversion of existing redundant buildings to other, predominantly residential, uses[35].

Figure 9 – Rate of development in Green Belt areas compared to England and the urban fringe Comparator Areas



House building is typically at very low density in the Green Belt despite national planning policy having encouraged and brought about higher residential densities across England as a whole since the 1980s. While development in the cities has taken place typically at 27 dwellings per hectare, development in the Green Belt has been at less than 9 dwellings per hectare (Table 3a).

Green Belt designation has controlled development resulting in a premium for existing property values and a suppression of the value of undeveloped land (Table 4). For the Green Belt as a whole the evidence shows that[36]:

- property prices are on average 20% higher than in non Green Belt areas – a premium paid for rural locations which are in close proximity to the convenience of urban facilities;
- land prices are low due to the limited opportunities to convert the land to a developed use, be that residential or commercial.

This effect is not common to all localities within all Green Belts. But where the value of property is strongly influenced by the proximity to particular urban areas, the effect is pronounced so that it cumulatively affects the average property value for the whole of the Green Belt.

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[35] Analysis by the University of Sheffield for the Countryside Quality Counts Project in 2006. An Analysis of Land Use Change at the Urban : Rural Fringe and in the Wider Countryside. See Chapters 2 and 3. Evidence available to view via http://www.countryside-quality-counts.org.uk/pubs_landUseChange.html

[36] University of Sheffield University, Green belt analysis 2009

Pastures Hill © Natural England

Future development in the Green Belt

Some adjustments to Green Belt boundaries are envisaged in approved or emerging development plans across England.

Infrastructure development (such as airports, motorways and electricity transmission and distribution lines) is a common feature in many areas of Green Belt. One of the largest and most controversial infrastructure proposals in England, a third runway at Heathrow Airport, would have a significant effect on Green Belt land if permitted, both in terms of the location of the runway itself and in the sourcing of construction material from extraction sites in other Green Belt locations. Green Belt issues also figure prominently in the new National Policy Statements on energy, issued for consultation by the Department for Energy and Climate Change towards the end of 2009. The new Infrastructure Planning Commission is likely to face proposals for new or larger overhead electricity transmission lines running through Green Belt areas in Derbyshire, Essex, Kent and North Somerset. Ministers have undertaken that National Policy Statements will reflect existing Green Belt policy.[37]

Land banking is a phenomenon particularly concentrated on, but not exclusive to, Green Belt land in areas that have enjoyed economic buoyancy in recent years, such as London, the Home Counties and Leeds. Land bankers can vary from major house builders and company pension funds, to speculators from across the world who have been sold land in tiny notional 'plots'[38]. In all cases land bankers are

[37] See CPRE et al, A Countryside Friendly Smart Grid, March 2009; and statements made by Jim Fitzpatrick MP (then a Minister at the Department for Transport) to the House of Commons Public Bill Committee on the Planning Bill, in January 2008.

[38] For examples of land banking in the Green Belt by pension funds such as those of BP and British Aerospace see Vidal J, '10,000 acres of Green Belt under threat', The Guardian 12 March 2007. For examples of speculative landbanking involving subdivision of land see CPRE, The Great Landbanking Carve-Up, December 2006.

waiting for the value of land to increase in the expectation that planning constraints will be weakened or removed.

Land held by well-established companies and funds is generally well-managed in its present agricultural state. The cases involving speculative sub-divisions of plots, though more common in the Green Belt than the countryside as a whole, only involve a tiny proportion of the total area of Green Belt land in England. Nonetheless there are concerns about how land affected by land banking can deliver positive benefits to society through long-term improved environmental management. This is particularly the case when there is a multiplicity of owners from across the world as has been seen in a number of cases.

Much of the land in the Green Belt banked by major companies is proposed for development by land agents working on their behalf through the development plan process.

The effects of the Green Belt designation on development – West Midlands

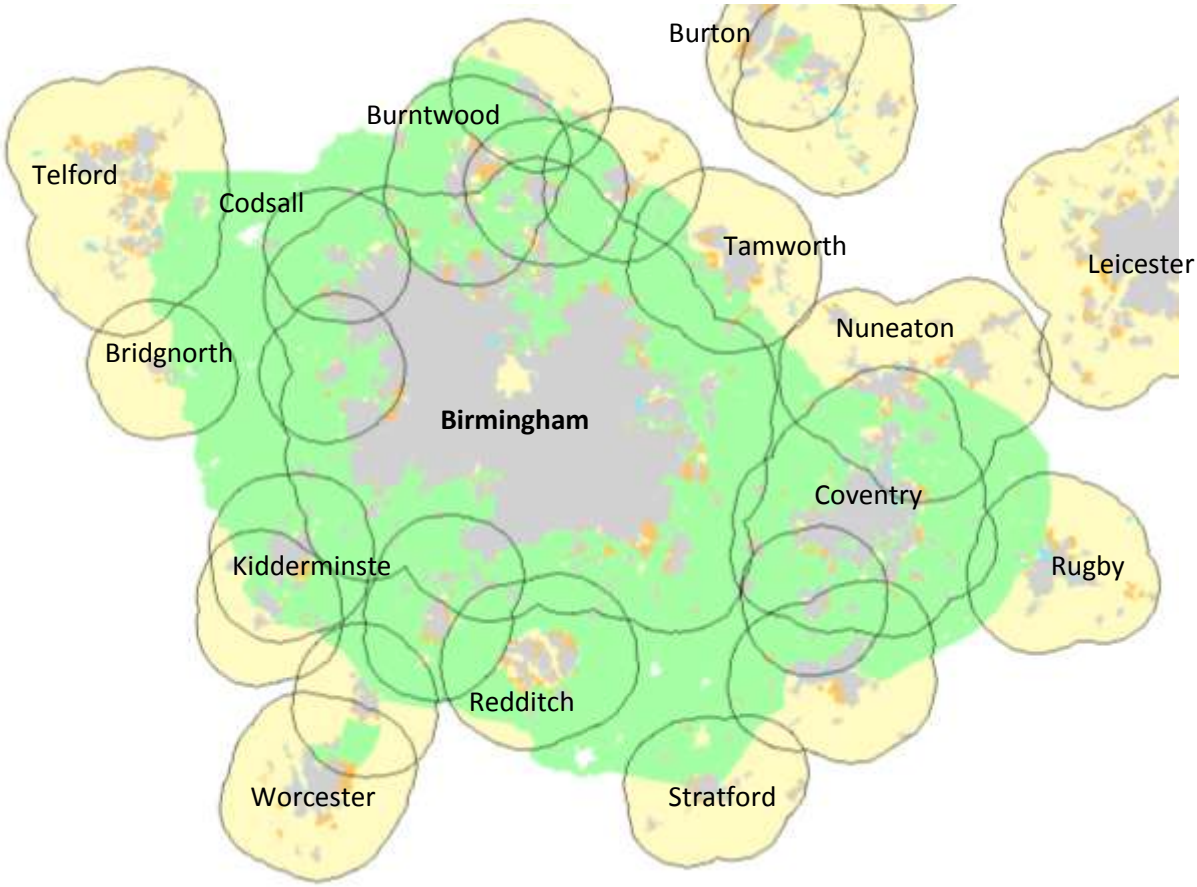
The effects of the Green Belt designation on rates of development can be seen more clearly by looking at the West Midlands Green Belt in greater detail. This encircles the West Midlands conurbation including Coventry, but touches only one edge of the middle ring towns such as Tamworth, Rugby, Stratford, Kidderminster, Bridgnorth and Telford. Leicester, the largest city in England without a Green Belt, appears on the eastern margin (Figure 10).

Few towns in the region are totally surrounded by Green Belt and substantially unprotected margins have allowed for the planned expansion of Telford and Redditch.

It is possible to compare development conditions and other characteristics for many of the West Midlands towns where Green Belt controls have been in place with other unprotected areas – the Comparator Areas (Table 5). Most frequently, the rates of change to developed uses for the Green Belt are markedly lower than for the overall area and for the Comparator Area respectively.

Between 1985 and 2006, the rate for Green Belt areas within Birmingham's margin was one half of that typical of the entire area (including the development of green pores within the city). For the middle ring towns, the rate of development in the Green Belt has usually been much less than the Comparator Area. One exception to this analysis is the case of Tamworth, which although comparatively small in surface area, serves as a reminder that development pressure tends to be high in parts of the Green Belt.

Figure 10 – West Midland Green Belt



Green Belt (including that part more than 5 km away from the nearest urban area)
Comparator Areas within 5 km of a relevant urban area, but are not subject to Green Belt controls.
Physical urban areas as at 1981.
Additions to the contiguous urban area 1981–2001
Lines depict a 5 km boundary around the main urban areas

Summary

Green Belt land provides a cross section of land cover types broadly representative of England as a whole. The character is mainly rural with just 7% classified as built up areas and gardens. Although the precise make up of the land cover varies between the Green Belts, in total there is a high proportion of arable and horticultural land, and improved grassland. Some individual Green Belts also have a high proportion of broadleaved and mixed woodland. Whilst 93% of Green belt remains undeveloped, a quarter if this land is neither woodland or registered as agricultural land and is perhaps more aptly described as `extended residential', often horse paddocks, gardens and small holdings.

The overall character of Green Belt land is not influenced by the planning designation. Where there are particular land cover types these are related to the geography and geomorphology of the land designated which is mostly located away from the uplands and the coast.

In terms of development, the evidence suggests that designation does have a significant impact on the rate of built development which is much lower in the Green Belt than for urban areas and a third less than the Comparator Areas. Without the Green Belt designation it is likely that the rate of development would have been much higher leading to a loss of undeveloped land and the openness protected by Green Belt policy.

Chapter 4

People and the natural environment

People and the natural environment

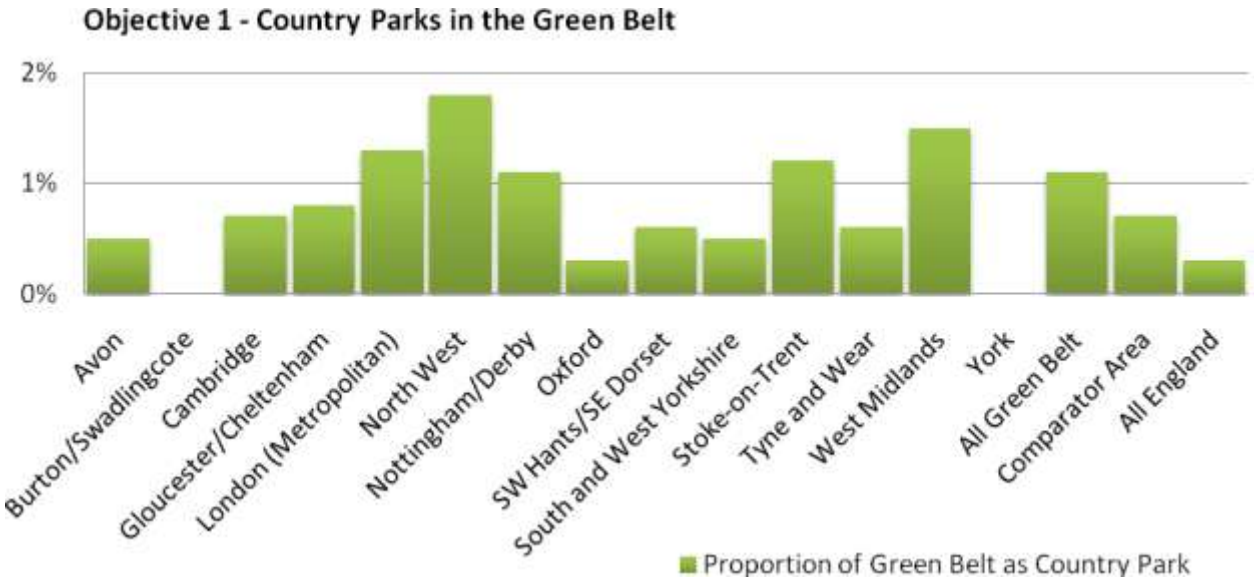
Introduction

This section reviews the contribution Green Belt land is making to the positive land use objectives in PPG2 relating to Objective 1: opportunities for access, and Objective 2: opportunities for outdoor sport and recreation. It considers these alongside educational and health benefits to assess the broader range of public opportunities for outdoor activity and engagement with the environment offered by the Green Belt.

Provision of space for outdoor recreation

The Green Belt is an important resource of opportunities for informal recreation. Green Belts in particular, but also the Comparator Areas, have higher than average proportions of some types of outdoor recreational open space. There is a smaller proportion of open access land and common land, however, which represent the largest land areas available, in England overall, for outdoor recreation (Table 6).

Figure 11 – Country Parks in the Green Belt



Provision of routes and trails

The density of the Public Rights of Way network is higher in the Green Belt than in other parts of England (Table 7) demonstrating the greater potential for local walks and opportunities to explore the countryside in the urban fringe. As Public Rights of Way are largely remnants of the historical network of routes linking villages, farms, communities and markets they often provide opportunities for people in urban communities to connect with the countryside.

Figure 12 – Open Access Land in the Green Belt

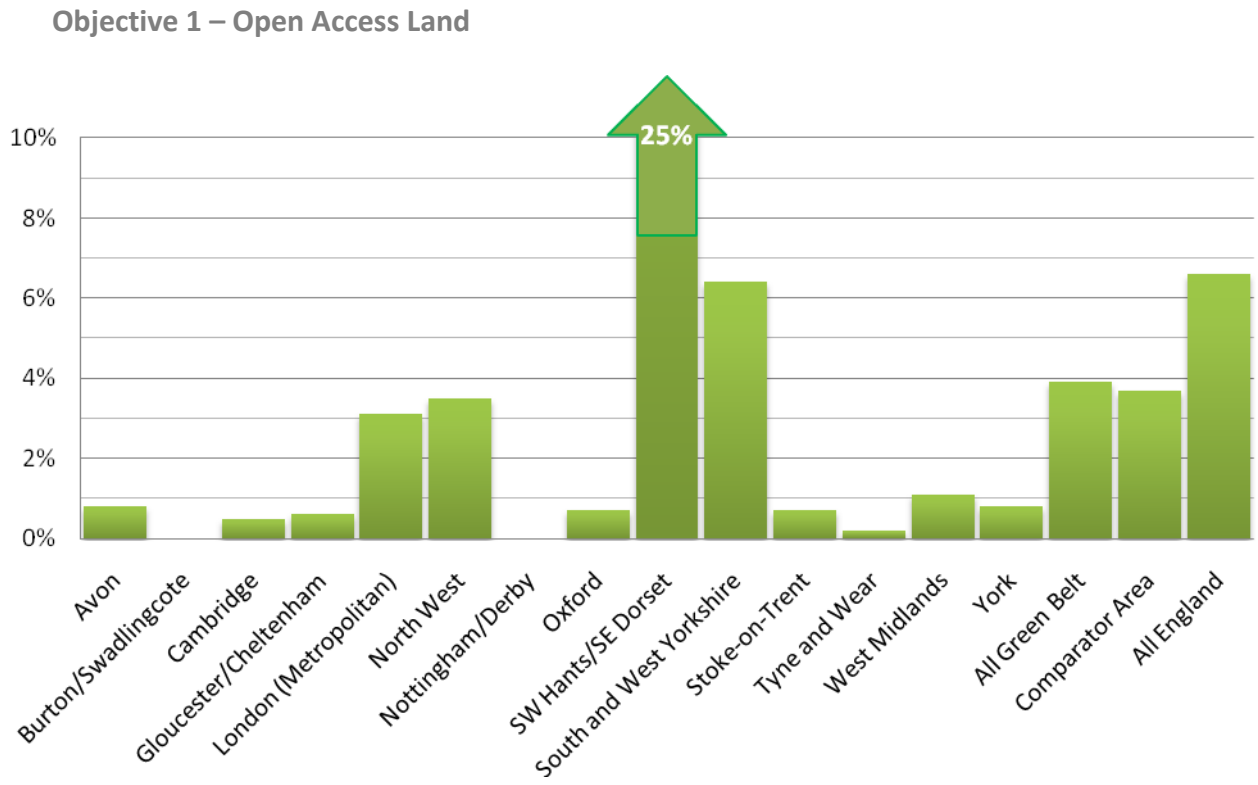
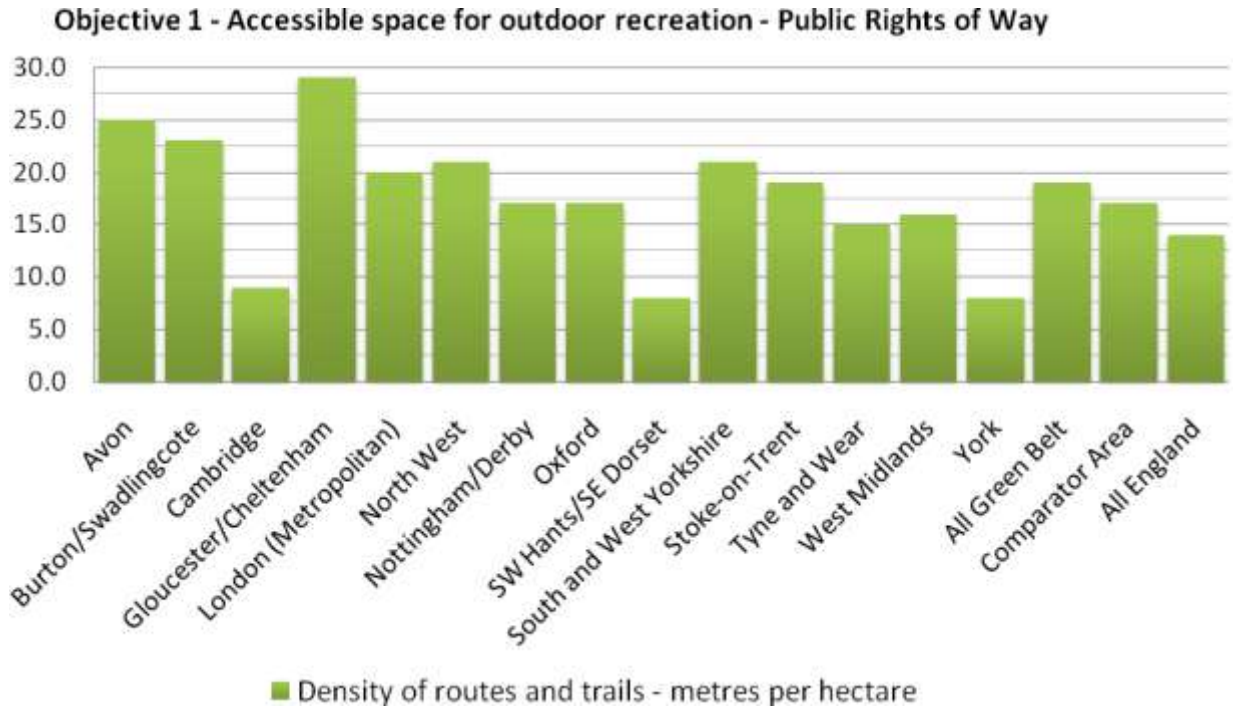


Figure 13 – Density of Public Rights of Way in the Green Belt



Most local authorities have a Rights of Way Improvement Plan with information on the quality of routes and whether they provide a useful resource for people living in the vicinity. Although not specific to Green Belt land, these documents are a useful source of local information on whether the network of routes in the urban fringe provide a useful resource for both recreation and local journeys on foot and cycle.

The Sustrans National Cycle Network (NCN) has been designed to meet the needs of people today and has improved provision for the urban population to walk and cycle within, around and between towns and cities. The Green Belt now contains 27% of the Cycle Network and a higher proportion is in the non- Green Belt urban fringe (42%). The traffic free parts of the NCN are almost entirely located in Green Belt and non-Green Belt urban fringe (Table 7).

The Oxford Green Belt Way

© Barry Symonds

Spearheaded by a local CPRE volunteer, the Oxford Green Belt Way was designed to encourage people to enjoy the countryside in the Green Belt around the city as well as to raise the profile of CPRE and its local campaigns. The Trail was opened to celebrate the Oxford CPRE Branch 75th Anniversary and 50 years of Green Belt.

A good rights of way network exists around Oxford, but there was no published map giving a dedicated walking route in the Green Belt around Oxford. The route was planned so that the starting and finishing point of each of the 9 stages making up the 50 mile circular route coincided with a regular bus service, making the route easily accessible by public transport.

For more details go to: www.greenbeltway.org.uk

The higher provision of certain types of recreation space and routes in the Green Belt and the Comparator Areas compared with the rest of England can partly be explained by policies and incentives to create recreational opportunities closer to where people live. It is also due to land becoming available for recreation in the large country estates. In many cases, these estates were built by wealthy industrialists in Georgian and Victorian England close to the major towns and cities where they made their money[39].

Accessible Natural Greenspace

Natural England recommends that everyone should have a variety of greenspace, including routes and trails, near to where they live and evidence shows that those with a good range of greenspace close to home, particularly children, are less likely to suffer from obesity and related health issues[40]. The need for local outdoor recreational opportunities is ever more important with the challenge of adapting to climate change and a low carbon economy. This is considered further in Chapter 8, New Challenges.

Accessible Natural Green Space Standard (ANGSt)

Natural England recommends that everyone should have the following quota of accessible natural green space:

- 2 hectares within 300 metres
- 50 hectares within 2km
- 100 hectares within 5 km
- 500 hectares within 10km
- 1 hectare of LNR per 1000 people

In Planning Policy Guidance 17 local authorities are encouraged to "undertake robust assessments of the existing and future needs of their communities for open space, sports and recreational facilities." The companion guide to PPG17 recommends the use of the Natural England Standard.

[39] Land Use Consultants with Kernon Countryside Consultants, The Nature and Potential of Agriculture Around Major Urban Areas in England, report for Countryside Agency and partners, July 2006, paragraph 3.44.

[40] Natural England, Green space access, green space use, physical activity and overweight: a research summary, 2009, based on original research for Natural England by University of Bristol and University of East Anglia

Bringing the outdoors closer to people

A study in April 2004[41] found that the Metropolitan Green Belt contains four areas of public open space over 500 hectares: the Lee Valley Regional Park, Epping Forest, Oaks Park (in Sutton) and Chobham Common (in Surrey).

The catchment areas for these spaces cover most of the eastern side of London north of the River Thames, and most of the boroughs of Croydon and Sutton in the south. There are a number of other green spaces greater than 2 hectares and 50 hectares respectively which between them assist the majority of outer London boroughs in meeting the relevant parts of Natural England's Accessible Natural Green Space Standard (see page 37).

The study also found that access was better within the area covered by the Greater London Authority than in the areas beyond it. Areas of the Metropolitan Green Belt where access was found to be particularly poor were around Walton on Thames and Weybridge in Surrey.

Bristol Bath railway path – First link of National Cycle Network running through the Avon Green Belt

[41] Land Use Consultants, Bringing the Big Outdoors Closer to People. Improving the Countryside Around London: The Green Arc Approach, Project Report. April 2004, pp.32-41

Educational activity

The proximity of Green Belt to urban areas and many schools and colleges offers opportunities for a range of environmental education activities. Some of these take advantage of the Country Parks, Local Nature Reserves and other local green space in the Green Belt. Some also take advantage of the educational access provided at farms supported with funding from the Environmental Stewardship scheme. Of the schemes funded across England 14% are within Green Belt areas and 12% in the Comparator Areas Table 10).

The Red Kite project in Northumberland is an example where an environmental initiative located in the Green Belt is delivering benefits to education, health, local transport and the economy.

Recreational use of Green Belt land

The Green Belt offers a range of opportunities for outdoor recreation, particularly to the 30 million people (60% of the population of England) living in and around the urban areas which the Green Belts surround. Some 58% of people questioned[42] said that they have visited the Green Belt in the last 12 months to undertake a variety of activities (Figure 13). Eighty-five percent of the members of the public who responded to the national survey agreed with the statement that 'the countryside around large towns and cities is somewhere I can go to get peace and quiet'.

Use of the Green Belt for quiet recreation also featured in the top three out of ten possible options describing how the public used the Green Belt in the three areas surveyed by CPRE, with response rates of between 81 and 90% in each area. Quiet recreation was also the most observed public use of the land by landowners and land managers in all three areas.

Sixty-five percent said they were interested in undertaking one or more activity in the next 12 months. Of the 12 options for activities that people wanted to undertake more often in the coming year, visiting for a day out was the highest at 35%, followed by quiet recreation at 26%.

[42] Questions were asked during two weeks in July/August 2009 as part of the Natural England's omnibus survey on people and the natural environment.

Green Belt Case Study

'Northern Kites' was a 5 year partnership project to return the red kite to north east England.

The project focus is on the urban fringe of Newcastle and Gateshead and very much in the Green Belt. As well as the re-introduction of this iconic species the project has also had a large number of socio-economic benefits some of which are captured below.

The presence of the red kites has created positive health benefits:

- Thirty-three Health Walks were organised between September and April 2009. Sixty-three people registered for these walks who have since reported better health.
- Two regular walkers improved their fitness so much they chose to become Health Walk Leaders.
- A survey of local residents found that 22% attributed an improvement in their physical state to the presence of the kites.
- The volunteer health survey indicated that many experienced health improvements as a result of volunteering.

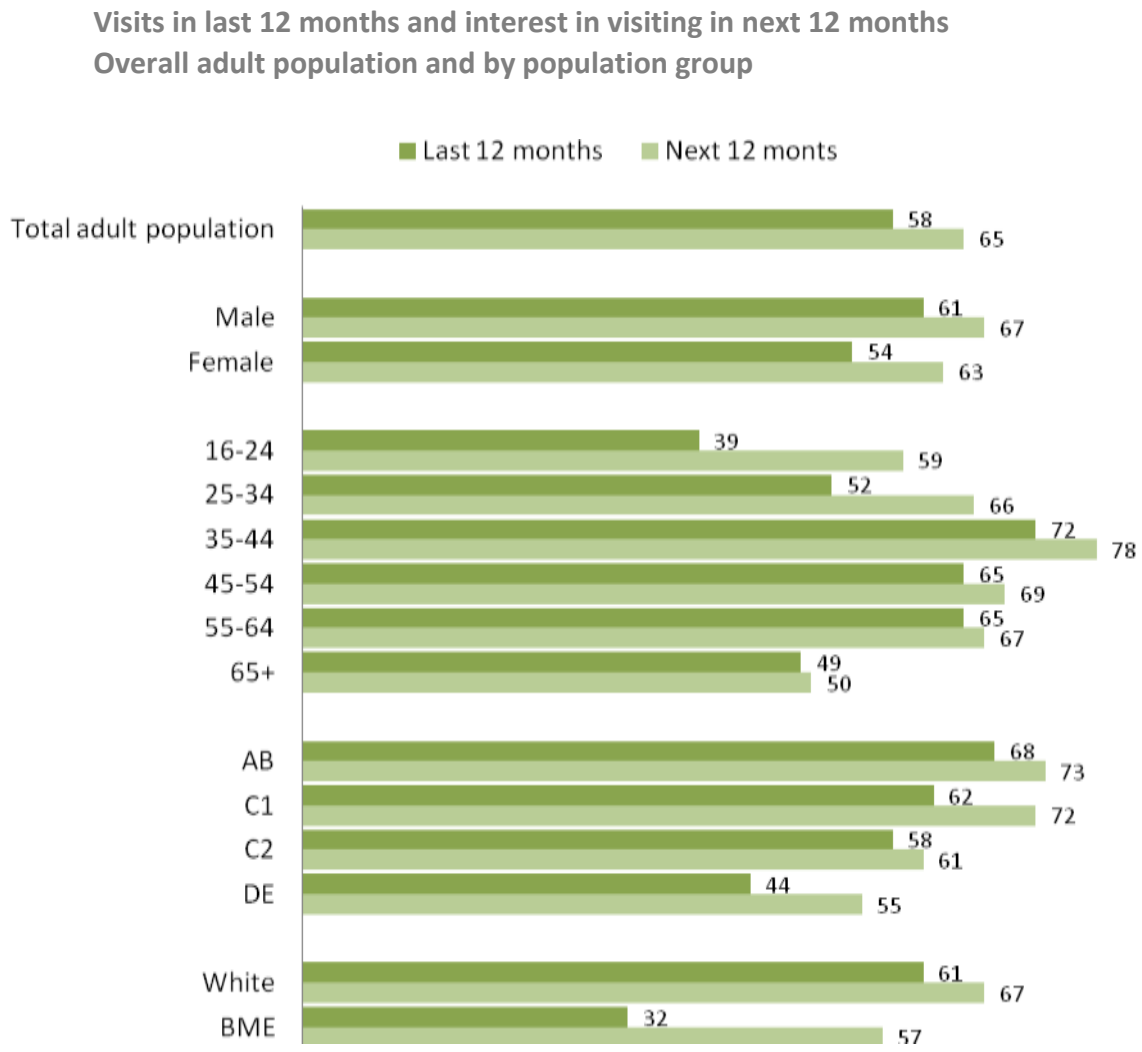
Learning to Fly… with Red Kites'

Northern Kites delivered a Lifelong Learning Programme for people of all ages including:

- The hugely successful and innovative Northern Kites 'Adopt-a-Kite' Scheme for schools. Through this, over 36,000 children in 107 schools in the North East were delivered positive red kite and environmental messages.
- KIDS4KITES, an on-line resource.
- The 'Reduce, Reuse and Recycle with Sprite the Kite' initiative, which educated over 60,000 children about sustainability issues.
- Kite themed adult education courses.
- Thousands of people, including over 150 landowners and managers, provided with bespoke Red Kite Information Packs.
- The completion of ten red kite research projects by local universities.

Research has shown that, despite forming 8% of the UK's population, minority ethnic groups only form 1% of all visitors to National Parks[43]. Surveys carried out for this project have given a perspective on the situation in relation to Green Belts. Sixty-eight percent of minority ethnic respondents were unaware that the countryside around many of England's major towns and cities is designated Green Belt land (compared to 21% of white respondents). Only 12% had been on a day trip to Green Belt land in the past twelve months (compared to 34% of white respondents). However, 27% indicated that they would be interested in visiting Green Belt land more often in the next twelve months (compared to 36% of white respondents).

Figure 14 – Visits to Green Belt land in the last 12 months



This chart provides a summary of the proportions of groups within the population visiting Green Belt land in the last 12 months and interest in visiting more often in the next 12 months.

The difference between actual visits taken and interest in visiting is largest amongst those aged 16 to 24, members of DE socio-economic groups and members of BME population. This variation could suggest unsatisfied demand – possibly due to a lack of personal transport or awareness of Green Belt land and opportunities to visit.

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[43] See BBC News, 'National Parks target Ethnic Minorities', downloaded from http://news.bbc.co.uk/1/hi/uk/4558809.stm on 21 October 2009

Health related recreation

The Natural England Walking the Way to Health Initiative (WHI) promotes and supports people to meet regularly and walk to improve their health. The annual value of health benefits from the WHI programme is estimated at £11 million in cost-averted savings to health care providers[44]. There are currently 599 WHI schemes which attract 32,000 participants (April 2009) to walk regularly. Of the 910 WHI meeting points, 22**%** were either on Green Belt land or within 500 metres of the boundary, suggesting a short walk might take place in Green Belt land.

Lambourne End Outdoor Centre Care Farm, Essex. © Henrietta Williams

The local surveys show that the public has a clearly stated preference (65-81% of respondents) to use the Green Belt to keep fit and that the most popular activity is walking, with more than 82% of those surveyed claiming to use the Green Belt for this. Cycling is also a popular keep fit activity in the Green Belt, with a range of between 38-51% in each region participating in this. The popularity of organised

[44] Natural England Technical Information Note TIN055 *An estimate of the economic and health value and cost effectiveness of the expanded WHI scheme 2009* http://www.naturalengland.org.uk/Images/TIN055_tcm6-12519.pdf

walking schemes combined with the evidence from the local surveys strongly suggests that Green Belt land could play an important role in health related initiatives in the future.

Other health initiatives and opportunities can also be provided in the Green Belt with its proximity to urban areas making schemes more accessible. Care farming is a good example of this. This uses commercial farms, woodlands and market gardens as a base for promoting mental and physical health through normal farming activity. Care farming has grown rapidly in the Netherlands in recent years, from 75 care farms in 1998 to 1,000 in 2008[45]. Schemes are present in a number of Green Belt locations in England, including Acorn Farm (Knowsley, Merseyside); Lawrence Weston (Bristol); and Lambourne End (Chigwell, Essex).

Outdoor sporting activity

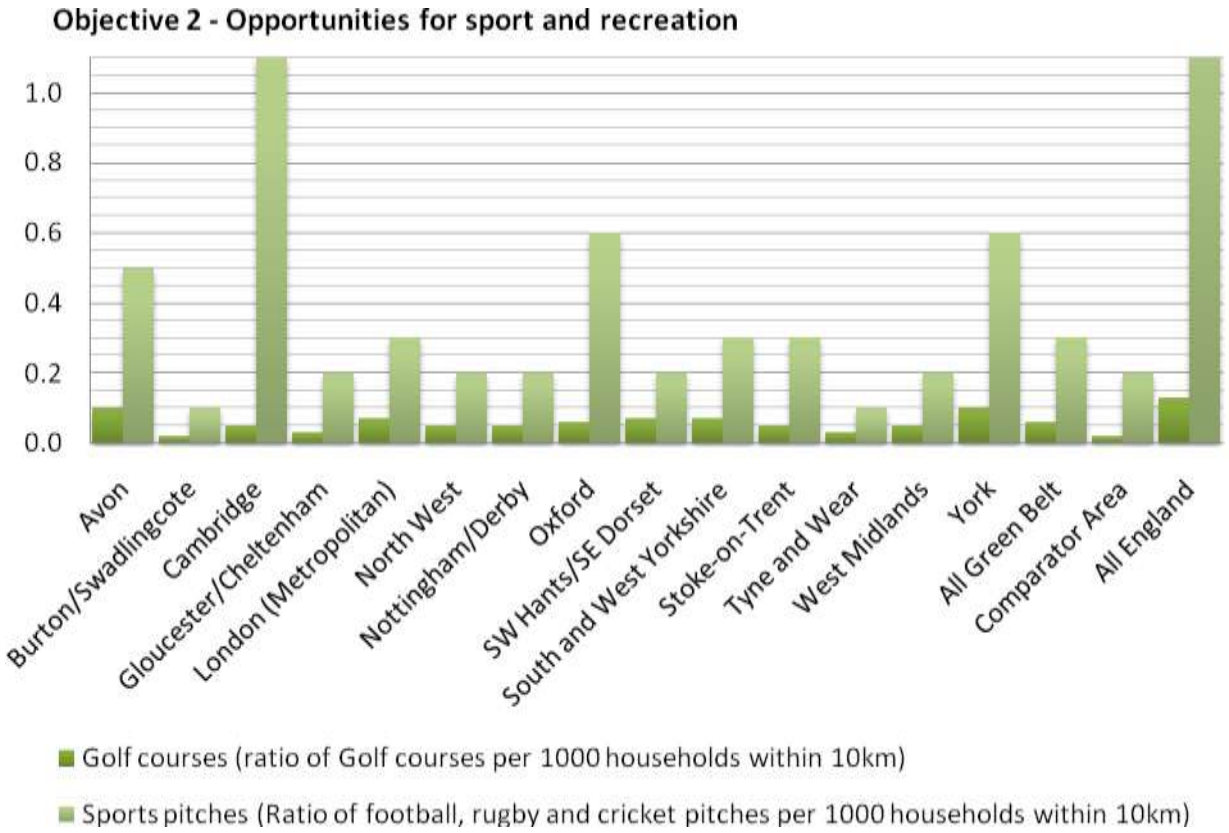
Green Belts also provide space for more organised recreation and sport. There are fewer football pitches in Green Belt than in urban areas, but slightly more golf courses and significantly more equestrian activities and leisure related businesses and attractions, even compared to the non Green Belt Comparator Areas (Table 8 and 9). The particular popularity of horse related recreation in the Green Belt is also borne out by CPRE's local survey work. This revealed that 9.3% of public respondents participated in horse riding. For illustration this can be compared to the national average of about 1% who choose horse riding as a regular activity[46].

The Green Belt is also home to some of the nation's significant formal recreational facilities such as the National Water Sports Centre, Holme Pierrepont in the Nottingham Green Belt.
© Jon Hancock Photography

[45] National Care Farming Initiative, www.ncfi.org.uk/news19-1-09.aspx, downloaded 12 October 2009.

[46] Sport England Active People Survey 2, 2007-2008

Figure 15 – Opportunities for sport and recreation in the Green Belt



Summary

Compared with the rest of England, Green Belt has less open access land but a greater share of some types of recreational resource including Country Parks, Public Rights of Way, National Cycle Network and Local Nature Reserves. People use Green Belt land for informal recreation and value it for the openness it provides. The number of educational activities supported by agri-environment funding in the Green Belt mirror the number across England and there are more health walks starting within or close to Green Belt than in the Comparator Areas. However, there is limited information about the quality of the places provided for outdoor recreation, how far they meet the needs of local people, whether people are able to get to the places, particularly on foot, cycle or by public transport, the patterns and regularity of use, and whether people have good information about the green space close to where they live.

Is Green Belt land achieving the land use objectives for access recreation and sport?

Despite gaps in the information, it is clear that Green Belt land is making an important contribution to the full range of `cultural' ecosystem services including healthy lifestyles, educational activity, opportunities for outdoor sport and social well-being. With its proximity to the majority of the population there is scope to do more to encourage outdoor education, recreation and sport close to where people live. This will reduce the carbon footprint, help people to engage more with the environment around them, and encourage more regular outdoor activity to promote healthier lifestyles.

Chapter 5

Attractive landscapes

Attractive landscapes

Introduction

This section reviews the contribution Green Belt land is making to the positive land use objectives in PPG2 relating to Objective 3: retaining and enhancing attractive landscapes, and Objective 4: improving damaged and derelict land.

All landscapes matter

Our landscapes are diverse and include rural, urban and coastal areas. They are the unique result of the interaction between natural and cultural influences over time. All landscapes matter and are important at a local scale.

A small area of the Green Belt is designated as either a National Park (just 84 hectares[47]) or Area of Outstanding Natural Beauty (9% compared to 16% of England as a whole and 13% of the Comparator Areas). The amount of land designated as an AONB varies considerably between Green Belt areas. Some have none (Cambridge, York, Nottingham and Derby, Stoke-on-Trent and Burton-upon -Trent and Swadlincote) while a quarter of the Metropolitan Green Belt around London is AONB, and more than a fifth of the Avon Green Belt (Table 11). Figure 16 shows the location of the landscape designations relative to Green Belt.

© Henrietta Williams

[47] 84 hectares now remain since the Green Belt designation was removed from the New Forest when the land became National Park in 2006.

Green Belt landscapes outside the AONBs can also be attractive and are perceived as such by the public. Of the 1026 people surveyed by CPRE in and around Bristol, London and Merseyside, over 95% agreed or strongly agreed with the statement that the countryside in their area was beautiful. Although some landowners or land managers dissented from this view, a clear majority (over 80%) of those surveyed still agreed or strongly agreed[48].

Are two designations better than one?

With significant parts of some Green Belt areas also designated as AONB it is legitimate to ask whether both designations are necessary.

While the purposes of the two designations are different, in planning terms the controls on development appear similar, with an 'exceptional circumstances' test for major development for AONBs paralleling the 'very special circumstances' test applying to Green Belts. In practice, however, development can be and often is allowed in AONBs where it can be assimilated into the landscape, or is seen as fostering social and community well-being. In Green Belts, by comparison, the overriding need is for open countryside to prevent urban sprawl. The two designations in the same area provide more weight to the effectiveness of planning control against both major and inappropriate development.

In addition to planning considerations, the AONB designation is complementary to the Green Belt positive land use objectives. It brings additional resources for landscape conservation and enhancement, and for recreational use. Though, unlike National Parks, AONBs lack dedicated planning authorities, they do have statutory management plans and officers responsible for their management.

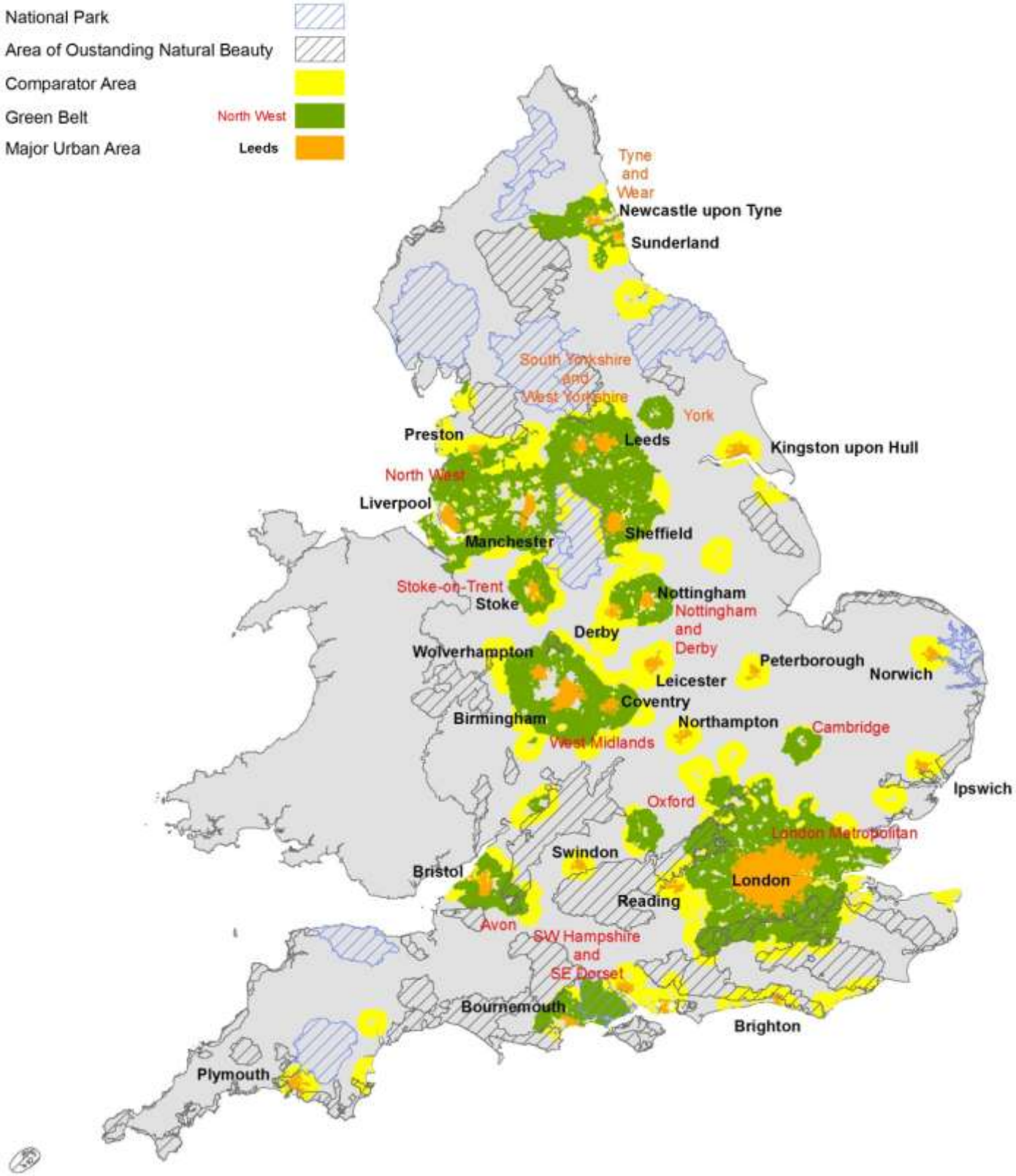
Taking all these factors in to account there is still much to be gained by having Green Belt designation alongside AONB designations. The tighter Green Belt planning controls protects the integrity of the AONB designation close to major towns and cities and at the same time the AONB designation brings additional resources for access and environmental management.

Landscape scale management

The natural environment is constantly subject to change influenced by both natural processes and human impact. To ensure that the character and biodiversity of areas are maintained it is important to plan and manage at a landscape scale. Community Forests are a good example of putting landscape scale management into practice and in this report the case studies featuring the Dearne Valley in South Yorkshire and the Essex Rainham Marshes also demonstrate what can be achieved. Natural England will be analysing landscape scale projects to learn lessons for the future, and to produce best practice guidelines. The Green Belt will be both a source of information and a focus for these guidelines, given their importance to so many people and their location close to centres of population.

[48] See methodology in appendix for details of survey work commissioned by CPRE for this project.

Figure 16 – Map of Green Belt and national landscape designations



Green Belt Case Study

The **Dearne Valley: Green Heart Project** in the South Yorkshire Green Belt is transforming a major former coal mining area into a network of green spaces, farmland and wetlands between former mining villages and the 'greened' coal tips of the higher ground.

The Vision for the Dearne Valley

- To create a landscape designed to allow people and wildlife to adapt to an uncertain future.
- To provide economic regeneration benefits that also contribute to a healthy natural environment.
- An area that makes contact with nature an everyday experience for local people.

Project Aims

The Environment Agency, Natural England and the RSPB believe that the Dearne Valley can be a better place to live and attract investment by:

- creating new wetlands that champion the very best environmental quality in the flood plain;
- improving access so that people can walk or cycle to their place of work, education or leisure;
- targeting agri-environment funding to promote less intensive farming;
- enhancing the management of existing open spaces for people and wildlife;
- implementing best practice for building design and development control; and
- supporting action to tackle climate change.

Quality of landscape

An understanding of the quality of the landscape can be gained from the findings of the Countryside Quality Counts (CQC) project[49]. The project sought to measure change in countryside quality based upon seven landscape variables: Agriculture; Boundary Features; Trees and Woodland; Historic Features; Semi-Natural Habitat; River and Coastal; Settlement and Development. It is not possible to gain a comprehensive assessment of the quality of all Green Belt land from this work because the 159 National Character Areas (NCA) used to assess the landscape do not match Green Belt boundaries. However, by assessing the percentage of each Green Belt covered by the National Character Areas it is possible to identify a dominant character assessment that accounts for approximately 95% of the overall surface area covered by England's Green Belts (Table 12, Figure 17).

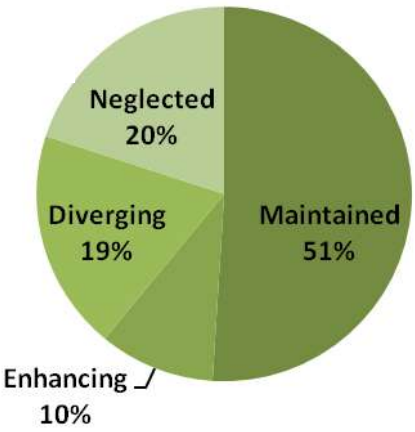
Figure 17 – Character assessment for Green Belt land

Green Belt Areas	Dominant Character Assessment (% of area that character assessment relates to)
Avon	Neglected (59%); Enhancing (33%)
Burton-on-Trent/ Swadlincote	Enhancing (67%); Maintained (33%)
Cambridge	Maintained (95%)
Gloucester and Cheltenham	Diverging (93%)
London (Metropolitan)	Maintained (55%); Diverging (42%)
North West	Diverging (70%); Neglected (21%)
Nottingham/Derby	Diverging (47%); Neglected (36%)
Oxford	Maintained (99%)
S&W Yorkshire	Maintained (44%); Neglected (32%); Diverging (23%)
SW Hants and SE Dorset	Maintained (65%); Neglected (35%)
Stoke-on-Trent	Maintained (64%); Neglected (36%)
Tyne and Wear	Neglected (51%); Maintained (43%)
West Midlands	Diverging (72%); Maintained (22%
York	Neglected (100%)
All Green Belts	Maintained or enhancing (38%); Diverging (36%); Neglected (20%)

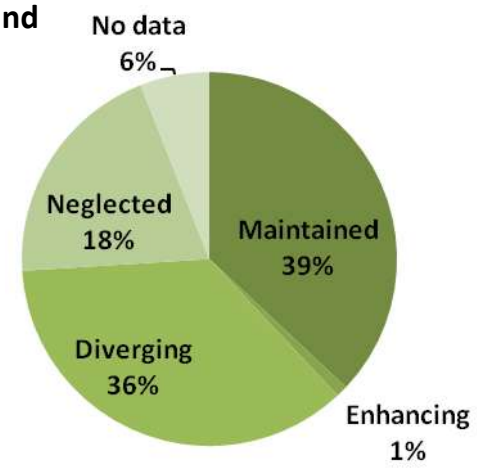
[49] www.countryside-quaility-counts.org.uk

	Consistent with character in late 1990s	Inconsistent with character in late 1990s
Stable	**Maintained** Character is strong and intact. Changes observed serve to sustain it. Lack of change means qualities likely to be retained.	**Neglected** Character of area weakened or eroded by past change or changes observed were not sufficient to restore qualities that made area distinct.
Changing	**Enhancing** Changes have restored or strengthened character of area.	**Diverging** Change is transforming character so that distinctive qualities are being lost or new patterns are emerging.

All England



Green Belt land



This analysis of landscape change suggests that the majority of individual Green Belts and a significant proportion (39%) of the overall Green Belt land area are stable and maintaining an established landscape character. In 36% of the overall area a new landscape character is emerging. In some cases (such as in the Green Belts in the Midlands or the North of England) this can be explained by changes associated with de-industrialisation of areas mapped as 'industrial' landscapes. Otherwise the new landscape character is more to do with subtle but often extensive changes in land management practices or small scale development, than with major development or land use change.

An example of this, raised in Chapter 3, is the phenomenon of scattered residential development, where existing structures are converted or new dwellings built within the footprint of an existing property. This has altered the character of many areas. Several of the diverging Green Belt landscapes contain a large proportion of former coal mining districts many of which are in a phase of landscape transition. Three Green Belt areas are predominantly neglected but, contrary to perceptions held in some quarters (see Chapter 2 above), the overall proportion of Green Belt land that is considered 'neglected' is lower than for England as a whole. Perhaps of more concern is that the character of the landscape in the overall Green Belt area is being 'enhanced' or strengthened in only 1% of the area, compared to 10% of England.

Towards active management of the Green Belt

Management Strategies for Green Belts, produced through the planning process, provide a means to identify potential funding opportunities for landscape improvement and to establish programmes. A dedicated local strategy has been produced by the London Borough of Harrow, including details of farm holdings in Green Belt areas and includes policies on visitor attractions and reducing litter through

teaching in schools. Many of England's Green Belts cross over several local authority boundaries or are in areas covered by two tiers of local government. In two tier areas there is often a division of responsibilities between a local planning authority (a district or borough council) and a county council that has responsibilities for or resources relating to farm holdings, public rights of way and landscape. A wider, strategic approach to managing the Green Belt can be helpful in such areas.

In April 2009 the West Midlands Regional Assembly's Regional Environment Partnership published a study titled 'Examination of Positive Uses of the West Midlands Green Belts'. The study examined the opportunities for the delivery of improved public benefits from the West Midlands Green Belts and how the Regional Spatial Strategy could promote such objectives. The study also considered whether there is value in identifying specific roles and functions to spatially distinct areas across the Green Belts and, in so doing sub-divided the Green Belt in to three characteristic areas known as Green Belt Area Types – 'Urban Spaces', 'Rural Fringe' and Outer Green Belt'.

The Study developed a single holistic set of sustainable objectives for the Green Belts based on PPG2 land use objectives along with more contemporary principles such as ecosystem services, climate change adaptation, and Green Infrastructure.

Damaged and derelict land

Despite evidence that many of the Green Belt areas have considerable areas of natural beauty and landscapes which are maintained or enhancing, there remains a perception that damaged, derelict or vacant land is a common feature of Green Belt[50]. As demonstrated above, Green Belt land is under more pressure for development than the wider countryside but a significant proportion retains its predominantly rural character – more than the area considered neglected. Certain areas of the Green Belt and the Comparator Areas, particularly those that abut the urban fringe, may appear unkempt but such land is not characteristic of the Green Belt as a whole and analysis of the available information on previously developed or 'damaged' agricultural land demonstrates this[51].

This is also supported with data from Homes and Communities Agency which shows that only 2904[52] hectares of the Green Belt is vacant or derelict brownfield land. This equates to just 0.2% of the total area of Green Belt and less than 2.5% of the area of Green Belt that is classed as 'developed land' (Table 13a and 13b).

A similar picture was presented in an older (1989) survey by the London Planning Advisory Committee of damaged land (including agricultural land) in Metropolitan Green Belt in Greater London. It identified just 900 ha of damaged land from information provided by nine outer London Boroughs which together are likely to be responsible for well over half the total Green Belt area (33,400 ha) within Greater London. Over half of the area covered by the nine boroughs was found to be associated with former mineral workings. On this basis one can estimate that under 5% of the Metropolitan Green Belt in Greater London (which in turn forms less than 10% of the Metropolitan Green Belt as a whole) could be described as degraded. It is also important to note that a relatively small proportion of this degraded land could be described as derelict in the sense of not being capable of beneficial use without treatment and 40% involved land considered damaged as a result of intensive agricultural uses, overgrazing or the

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[50] The responses to questions on Green Belt in Natural England's national survey revealed 5% associated Green Belt with derelict land.

[51] Peter Bibby analysis of National Land Use Data.

[52] Vacant land 876 hectares; derelict land 2,028 hectares

keeping of horses[53]. However, derelict land can be restored and reused and the Dearne Valley case study above provides an example of how this can be achieved.

Litter and fly-tipping

Fly tipping and illegal waste disposal can also cause serious damage to both the appearance and function of the landscape. The problem takes a wide variety of forms, from the criminally organised operations to casual and opportunist dumping of waste. A major factor in fly tipping is proximity of a given place to a major road or thorough fare. The fact a place is relatively isolated both physically and temporally is also a strong contributing factor. This problem exists in all environments and not just the Green Belt.

A 2003 study by Catherine Bickmore Associates[54] investigated anecdotal reports by farmers that persistent fly-tipping is a particular problem in urban fringe areas (including but not limited to Green Belt). The study drew on 2003 data finding that fly tipping is considered to be a significant problem by 73% of local authorities in England, Scotland and Northern Ireland with an estimated cost to farmers of £57 million in 2002. In 2001, it was estimated to represent around 600,000 tonnes of waste. More recent research by the Environment Agency and the National Fly-Tipping Prevention Group broadly bears out these figures and suggests that a significant majority of farmers and landowners are affected. Specific figures are not available, however, for the Green Belt or the urban fringe.

CPRE campaigns actively to address the problems of litter and fly-tipping through its *Stop the Drop* campaign[55]. Views were sought in the CPRE survey[56] on how litter and fly-tipping are affecting countryside in the Green Belt. The response showed that the issue is clearly a concern. Seventy-nine percent of all respondents had seen litter in the Green Belt at least occasionally. Amongst land professionals surveyed in the Metropolitan Green Belt, this figure is 100%. Across the three areas that CPRE surveyed, approximately 20% more land professionals than the public had seen waste 'often'. A recurrent theme in responses was that the problem was concentrated next to major roads, such as the M25 around London or the A38 south of Bristol, demonstrating that much of the problem of litter is caused by people throwing rubbish out of car windows.

Analysis of responses identified specific hotspots for litter and fly-tipping in the three Green Belt areas surveyed:

- Avon: Dundry Hill – a familiar landmark for Bristol which in landscape terms is an outcrop of the Mendip Hills (an AONB outside the Green Belt); and Combe Hay Lane in Bath near the Odd Down Park and Ride site, and also part of the Cotswolds AONB.
- London: Epping Forest – one of the most important areas of natural green space in the Metropolitan area.
- Merseyside: the Sefton Coast – which also features Anthony Gormley's artwork 'Another Place' and much of which is also a wildlife site of national and international importance[57].

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[53] LPAC, Damaged Land in the Urban Fringe, Land Capability Consultants 1990.

[54] Catherine Bickmore Associates, 'The State and Potential of Agriculture in the Urban Fringe', 2003, Box 5.5.

[55] For more details go to www.cpre.org.uk/campaigns/stop-the-drop.

[56] See Annex 1 for details of survey work commissioned by CPRE for this project.

[57] Since the survey was carried out we have been informed by local CPRE volunteers that there have been significant recent improvements in the tidiness of the areas of the Sefton Coast around Crosby and Waterloo that are

All of these 'hotspots' are in locations that are especially valuable in environmental terms, and particularly accessible and well-used. This suggests that encouraging wider use of the Green Belt for quiet recreation – something that both CPRE and Natural England strongly believe in – will bring its own challenges in terms of educating members of the public to respect the natural environment on the edge of cities. But greater public use can also mean that areas become more self-policing, and therefore possibly less vulnerable to environmental crime and neglect.

Encouragingly, the public are prepared to do something about litter. Perhaps unsurprisingly, there was virtually unanimous (99.7%) support in the CPRE survey for making a personal commitment not to dump rubbish in rural areas. But significant numbers of respondents also indicated that they would be prepared to take further action, with 65% saying that they would be prepared to report other people for dumping rubbish; 50% saying that they would volunteer to help with clearing up the mess; and 35% saying that they would join a parish council or other group to help create a community response to fly-tipping.

Summary

The landscapes within Green Belts are varied and dynamic. They are mostly rural in character but include scattered settlements, development associated with the edges of urban areas including road and rail infrastructure, as well as former mining areas in need of regeneration. Based on the National Character Area approach, 39% of the land is maintained in a stable condition (lower than the national figure of 51%), and a further 36% is 'diverging' from its established character with a new character emerging (significantly higher than the national figure of 19%). 18% of the land is categorised as 'neglected', a slightly lower proportion than for England as a whole (20%). Only a small percentage (0.2%) is recorded as vacant, damaged or derelict. A high proportion is subject to landscape scale regeneration such as through the Community Forest programme.

The majority of the population believes Green Belt to be beautiful and rich in wildlife. A few are concerned about damaged land, litter and fly-tipping and, although there is some evidence of this in the Green Belt, it relates to a small proportion of the land and at very specific locations particularly near to main roads. A better understanding of these areas is required to appreciate the impact they have on local communities and to put in place ways to improve their quality.

Is Green Belt land achieving the land use objectives for attractive landscapes and improving damaged and derelict land?

A significant proportion of Green Belt land retains a rural and open character, but a significant proportion is diverging from its established character and action is required to prevent this land from falling into neglect in the future. Regeneration schemes such as Community Forests have helped to enhance more extensive areas of neglected land within both Green Belt and other urban fringe areas but there is more to do. A landscape scale approach is required to deliver this along with a successful business model for funding regeneration and landscape enhancement.

A more detailed investigation of landscape quality in Green Belt and urban fringe areas is needed through use of landscape character assessment and tranquillity mapping, to understand which locations need improvement.

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particularly well used by the public. The Sefton Coast won a Quality Coast award in 2009 and part of the coast, at Ainsdale-on-Sea, won a Blue Flag award in 2006. Litter problems remain in some of the less used areas of this coast.

Chapter 6

Healthy natural systems

Healthy natural systems

Introduction

This section reviews the contribution Green Belt land is making to the positive land use objectives in PPG2 relating to Objective 5: securing nature conservation.

Priority habitats

The UK Biodiversity Action Plan identifies the most important habitats for nature conservation. Of those that are mapped, 13% of the area covered occur within the Green Belt (10% in the Comparator Areas), despite Green Belt covering only 12% of England's land (Table 14). There is variation between habitats. Deciduous woodland (20% of the total habitat area in Green Belt and 13% in Comparator Areas) and Lowland Heathland (36% in Green Belt and 13% in Comparator Area) are well represented whereas other habitats such as coast and uplands do not feature significantly within the Green Belt or the Comparator Areas. The lack of the latter, in particular, is unsurprising given the few large towns or cities in or directly adjoining upland areas.

Some habitats, such as deciduous woodland, are widespread across all Green Belt areas, whilst others are concentrated in few.

Protected sites

Of the 95,859 hectares of National Nature Reserves in England, just 5% are within land designated as Green Belt (3% in Comparator Areas). There is a significantly higher number of Local Nature Reserves (LNR) with 33% of the total LNR land area within Green Belt and 20% in the Comparator Area (Table 14).

In the local surveys[58], when asked to consider future uses of the Green Belt, additional nature reserves were a popular choice among the public and, although slightly less favoured among landowners, still had substantial support amongst this group in two of the three areas surveyed. While land professionals in Bristol and London strongly agreed with the statement that 'more could be done to encourage birds and wild animals' in the Green Belt (79 and 83% respectively), Merseyside showed less support (55%). Conversely, 36% of Merseyside landowners and professionals disagreed, whereas disagreement elsewhere was at less than 6%.

Sites of Special Scientific Interest

The area and condition of Sites of Special Scientific Interest within Green Belts provides a further benchmark against which to assess the value of Green Belts for nature conservation. Green Belt land accounts for only 8% of the total area of SSSI in England – 89,431 hectares as compared to 1,076,978 hectares nationally (Table 14). In terms of the condition of sites the majority are in favourable or recovering condition – 85% within Green Belt compared to 88% nationally (Table 16a). Of the hectares of SSSI destroyed or partially destroyed, 30% are within the Green Belt, but it should be noted that this involves a very small area of land (66 hectares). Overall there are fewer SSSIs and they are in a slightly poorer condition than the countryside as a whole.

[58] See Annex 1 for details of local survey work commissioned by CPRE for this project.

Figure 18 – The percentage of SSSIs in favourable or recovering condition in Green Belt areas compared to England and the urban fringe comparator areas.

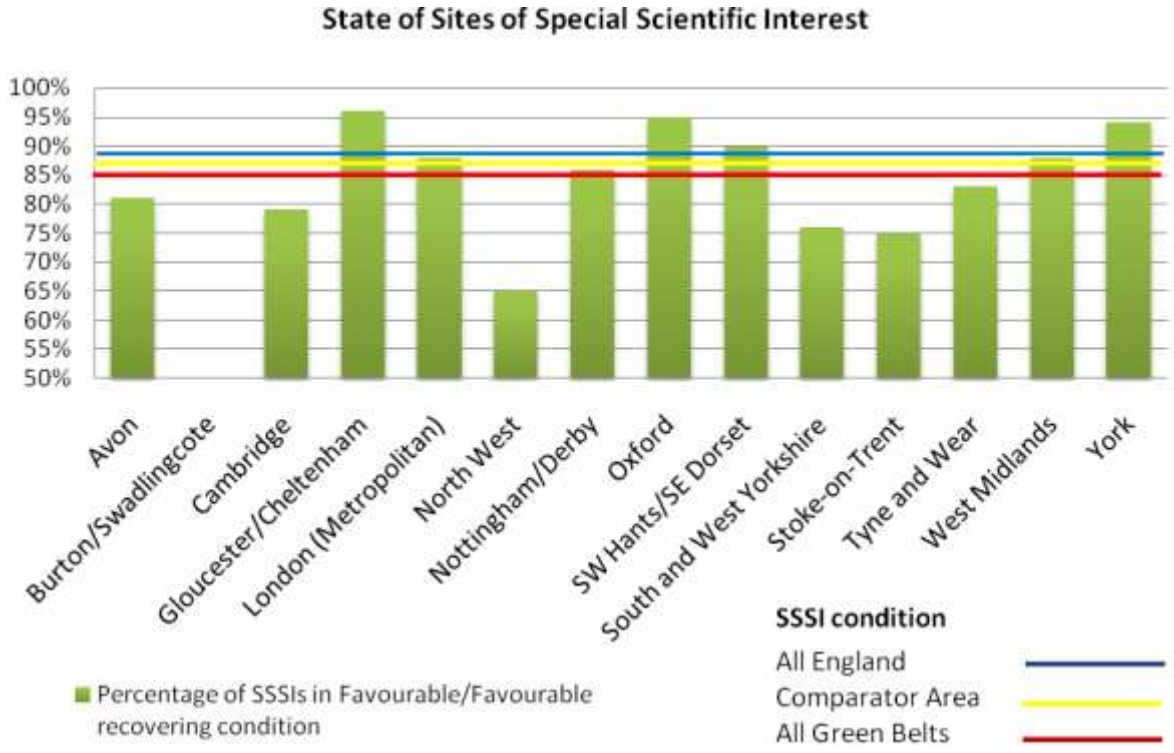
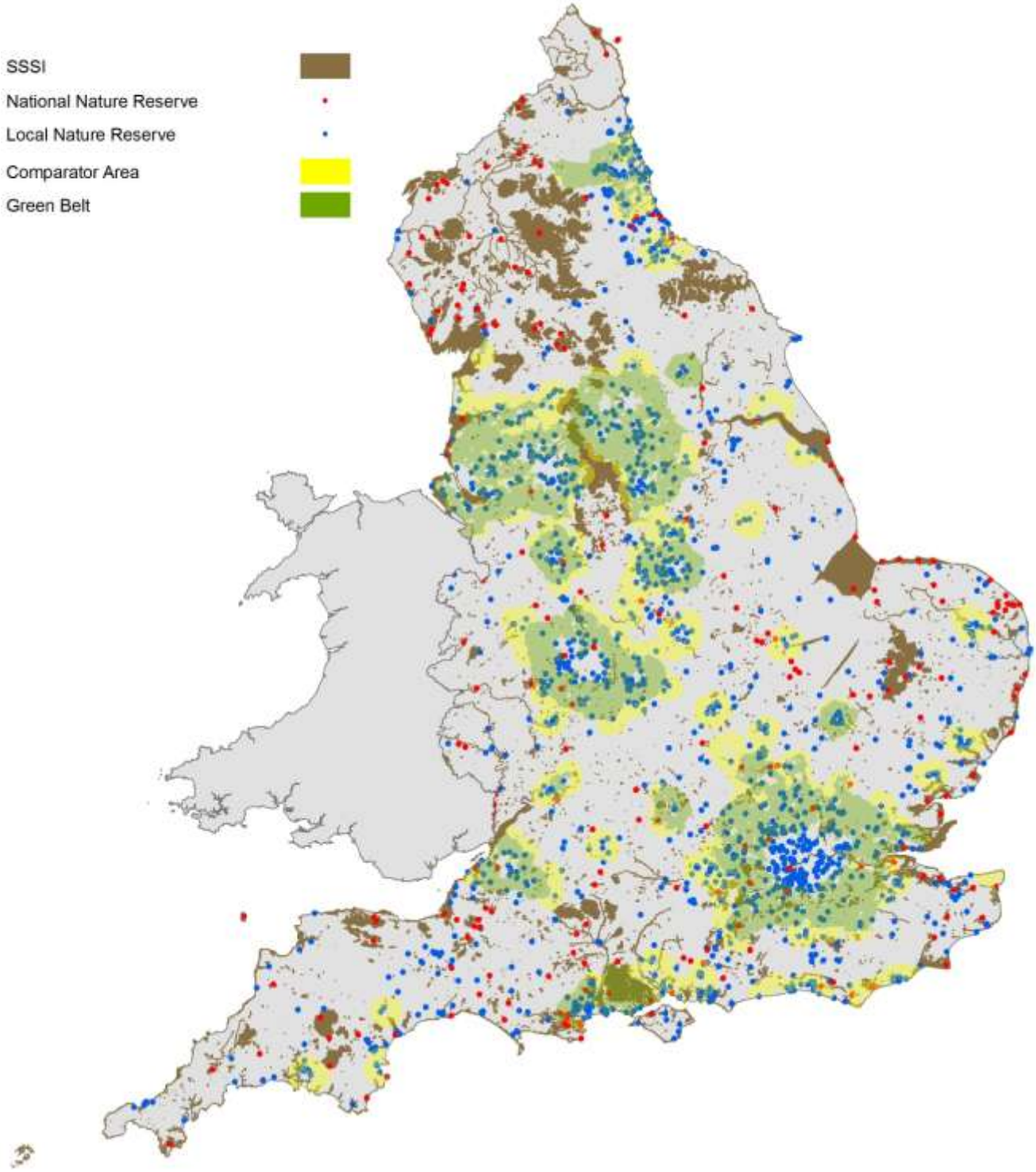


Figure 19 – Map of Green Belt and sites protected for biodiversity and geodiversity



The main threat to unfavourable SSSIs nationally is overgrazing and this is similar within both Green Belt and Comparator Areas (Table 16b). Green Belt SSSIs suffer from more under grazing (28%) compared to Comparator Areas (13%) and all of England (9%) and more inappropriate scrub control (21%, 13% and 9% respectively). Green Belt SSSIs in unfavourable condition do not suffer as much water pollution from agricultural run-off as land in other parts of England (6%, 11% and 15%).

Analysis of the remedies for dealing with the threats (Table 16c) reveal that Higher Level Stewardship through agri-environment funding is the main mechanism for improvement for Green Belt, the Comparator Areas and all England (44%, 37%, and 40%). The main difference is that 'Flood Risk

management – capital improvement schemes' is used less often in Green Belt and Comparator Areas compared to all England (5%, 7%, 17%).

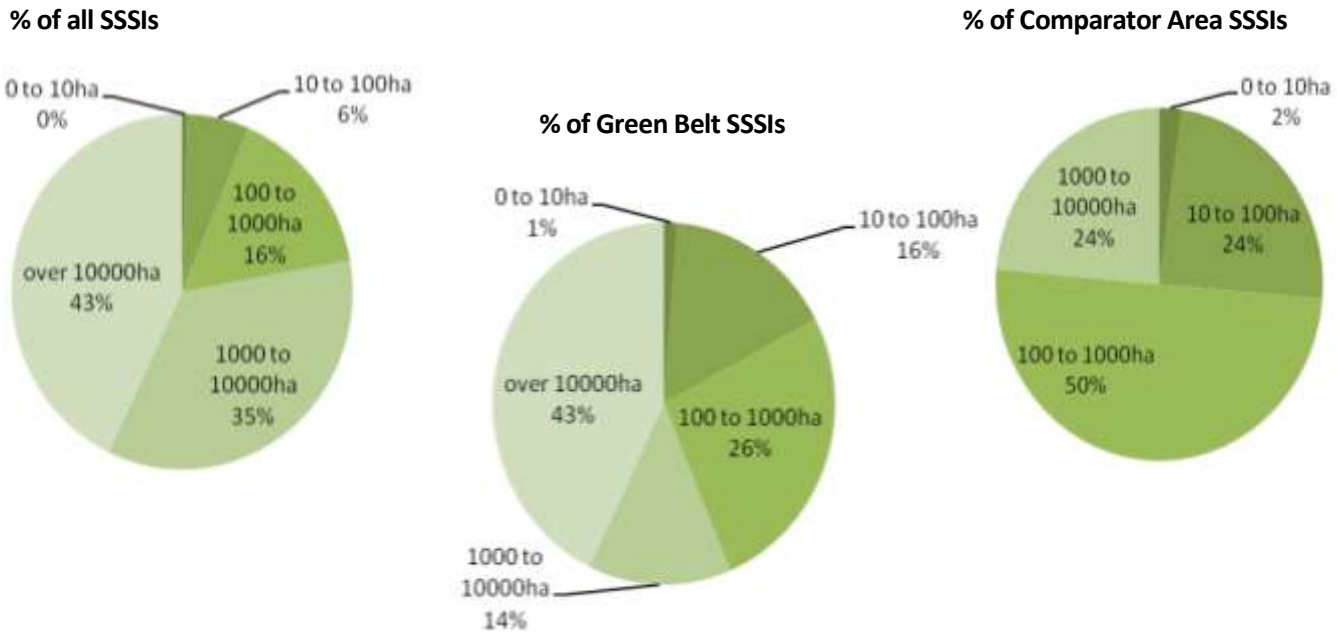
In terms of the bodies responsible for improvement of unfavourable SSSIs, by far the largest is Natural England, responsible for around 70% across Green Belt, Comparator Area and the rest of England. The next largest are the Environment Agency and the Forestry Commission (Table 16d).

When SSSIs are grouped according to size, this reveals that there is a slight tendency for smaller sites (under 100 hectares) to be within both Green Belt and the Comparator Areas, and slightly fewer larger sites (over 100 hectares), as illustrated in Figure 20 below. Analysis of the total area covered by SSSIs reveals that there is just one in Green Belt over 10,000 hectares and that this covers 43% of the Green Belt land covered by SSSIs.

Part of the explanation for the relative lack of large and/or nationally important nature conservation sites in the Green Belt may lie in the gradual fragmentation of Green Belt landscapes by both large-scale infrastructure development such as airports and motorways, and smaller scale 'extensive residential' development as highlighted in Chapters 3 and 5.

The United Nations Environment Programme (UNEP) has recently drawn attention to studies finding that although developed land covers only a small proportion of North America's land base, it has a large impact on ecosystem services. For example, roads occupy just 1% of the US land area, but they alter the ecological structures and functions of about 22% or more of the land. In US regions with rapid 'exurban' (or extensive residential) growth, species richness and endemism diminish as urban cover increases, threatening biodiversity. The fragmentation of natural habitat threatens more than 500 endangered US wildlife species with extinction. It also provides new entry points for invasive species already introduced through other pathways [59].

Figure 20 – Proportion of SSSIs at different sizes when compared to the total population



[59] United Nations Environment Programme, *Global Environment Outlook GE04 – environment for development*, 2007, p.259 at Box 6.30.

Green Belt Case Study

Wildspace for a World City

'Wildspace' is a project that seeks to create a flagship conservation park centred around the RSPB nature reserve at Rainham Marshes.

The objective is to harness the benefits of the urban regeneration programme of London Riverside to improve the image of the area and provide an internationally celebrated ecological and leisure resource for the new and existing communities of east London.

The Wildspace Challenge

- Part was formerly MoD rifle ranges.
- Contains a large and active Landfill site.
- Virtually 'off limits' to Londoners for 100 years.
- A flagship project for the East London Green Grid – a spatial planning framework that encourages social and economic regeneration through the environment.

Social benefits

- Investment of over £7m from London Thames Gateway and Thurrock Development Corporations in the recognition of Wildspace being an important driver of economic regeneration.
- The establishment of 10 km of paths and cycleways in an area which has had virtually no public access for over 100 years.
- An eco-friendly Education and Environment centre and Wildspace learning zone.
- A freely accessible cafe, wildlife garden and children's adventure play area to engage non-traditional audiences.

Environmental benefits

- A degraded and inaccessible area of Green Belt restored and enhanced.
- The natural environment placed at the centre stage of regeneration.
- Beneficial management of London's largest area of freshwater grazing marsh.
- Exemplar restoration of a major landfill site providing 150 ha of new accessible greenspace.
- A major recycling and materials recovery facility established as part of the long-term use of the restored landfill site.

Birds in the Green Belt

Birds are used as an indicator of general biodiversity in many UK and European policy areas, based on extensive data on abundance and trends collected over the past 30 years or more. As noted in Chapter 3, most Green Belt land is in lowland rather than upland areas. An analysis was undertaken for this report[60] whereby bird abundance and population trends were compared between the Green Belt, Comparator Areas and other areas of rural lowland in England over the period 1994–2008.

The analysis revealed significant differences in abundance of most of the 67 species available for these three land types. In particular, the analysis showed that many species of bird were more abundant in Green Belt than in the Comparator Areas and in other rural lowland (Table 17, summarized in Figure 21).

Figure 21 – Summary of comparison of bird species abundance and population trends between Green Belt, Comparison Areas and lowland England

	Number of bird species with higher abundance or more positive trends	Number of bird species with lower abundance or more negative trends	Number of bird species with no difference in abundance
Bird abundance (no. of birds recorded in sample squares)			
Green Belt compared to Comparator Area	20	9	38
Green Belt compared to Rural Lowland	20	12	35
Comparator Area compared to Rural Lowland England	12	19	36
Bird population trends (whether numbers are increasing or decreasing)			
Green Belt compared to Comparator Area	11	3	53
Green Belt compared to Rural Lowland	12	19	36
Comparator Area compared to lowland England	5	13	49

The species that are more abundant within Green Belt land than the Comparator Areas include the familiar blackbird, robin and chaffinch, as well as several species of conservation concern, such as mistle thrush, song thrush and starling.

[60] Newson S.E., Siriwardena,G. & Chamberlain,D. 2009 A comparison of bird abundance, population trends and species richness in greenbelt, non-greenbelt urban fringe and in the wider countryside – unpublished report, British Trust for Ornithology.

Similarly, in looking at bird population trends, Green Belt has significantly more species with increasing populations than the Comparator Areas. The species with increasing populations include coot, pied wagtail and tree sparrow. There is little statistical difference in population trends between Green Belt and rural lowland, but on the Comparator Areas several species populations were doing less well compared to rural lowland.

Butterflies in the Green Belt

Butterflies are now part of the UK indicator set for assessing biodiversity and have been developed as indicators of finer scale habitat and landscape changes than birds. The UK butterfly fauna contains both habitat `specialist'[61] and `generalist'[62] species and this mix provides a range of tolerances and requirements. Butterfly populations are very sensitive to changes in weather, habitat quality and pattern of land use and make good indicators of overall quality of land. An analysis of the UK Butterfly Monitoring Scheme data[63] shows a similar pattern to that of bird data: there are significant differences in population trends for individual species between Green Belt, Comparator Areas and rural lowlands (Table 18, summarized in Figure 22). These trends apply to both generalist species and habitat specialists.

The picture for Green Belt is mixed, with some species doing better than on Comparator Areas or rural lowlands and vice versa. In terms of overall numbers of species with a higher or positive trend in abundance, Green Belts appear to be more favourable locations for butterflies than the Comparator areas.

Figure 22 – Summary of comparison of butterfly species abundance and population trend between Green Belt, Comparison Areas and lowland England

	Number of butterfly species with higher abundance or more positive trend	Number of butterfly species with lower abundance or more negative trend	Number of butterfly species where no significant difference in abundance or trend
Butterfly population trends			
Green Belt compared to Comparator Area	8	4	19
Green Belt compared to Rural Lowland	7	7	17
Comparator Area compared to Lowland England	6	12	13

[61] These are species reliant upon specific, semi-natural habitats and are generally regarded as vulnerable to change and declining in the UK.

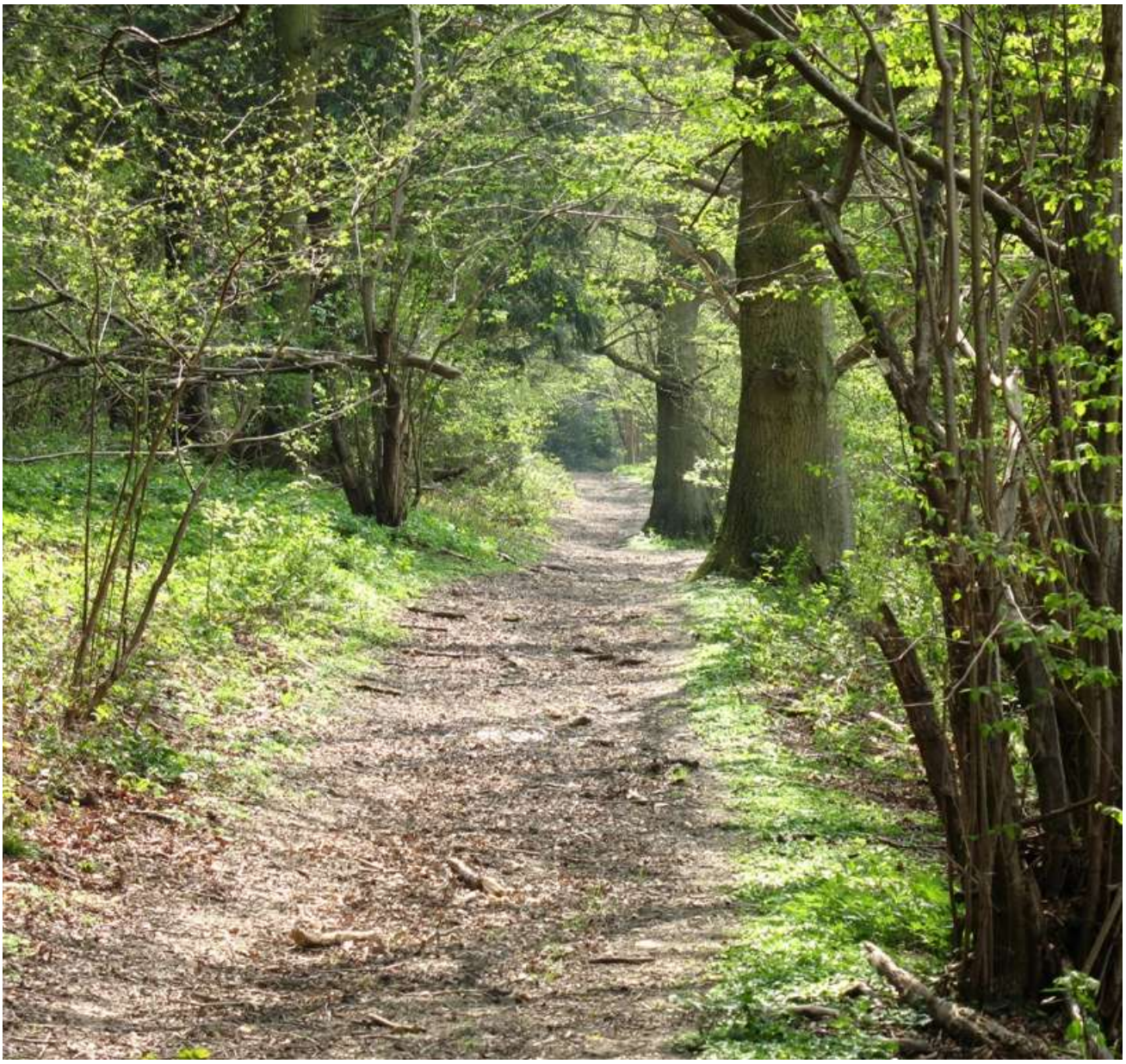
[62] These are butterfly species that occur widely across the countryside and rural/urban fringe.

[63] Roy,D.B & Harrower, C.A 2009 Unpublished bespoke analysis using UK Butterfly Monitoring scheme data; Centre of Ecology and Hydrology and Butterfly Conservation.

The most dramatic difference is the dark green fritillary which is increasing in Green Belt and Comparator Area compared to rural lowland. In contrast the small blue shows large increases on Comparator Areas compared to either Green Belt or rural lowland. These results need to be seen in the context of sample size and national trends but are significant within the current analysis.

Species with a negative population trend in Green Belt include habitat specialists such as the silver washed fritillary and familiar urban species that also utilise marginal habitats in the rural lowlands such as small tortoiseshell, orange tip, small copper and peacock butterflies.

All butterfly population trends need to be seen in the context of long term downward trends in the numbers of some species with wet summers depressing numbers in the past two years. The 'positive' results described here are where the decline is slower, rather than a consistent increase over baseline.



Presthope woodland path © Natural England

Pollution incidents in Green Belt

Data supplied by the Environment Agency (Table 19) suggests that pollution is a significant concern in Green Belt and the Comparator Areas, and is an illustration of the particular extent of urban intrusion into these areas. Across England, recorded incidences of twelve different types of pollution between 2001 and 2008 were proportionally higher in Green Belt areas (19% of all incidents on 12% of the land) and Comparator Areas (14% on 10% of the land) for all categories including agricultural waste, contaminated water and sewage. The majority of the pollution incidents recorded on Green Belt land were in South and West Yorkshire (523 incidents or 6% of total) London (Metropolitan) (5%) the North West (3%) and the West Midlands (2%).

Public perceptions of nature in Green Belt

Green Belts are seen by the public as a place where wildlife is protected and the nature value of Green Belts appear to be both an important part of the public experience and one of the higher priorities for the future in terms of the services provided by Green Belt land. Over 80% of the public and landowners responding to the local Green Belt surveys by CPRE agreed with the statement: 'there are places in the countryside where plenty of birds and wildlife can be seen'. At least 86% of all respondents wanted to see more wildlife. 43% of the respondents to the Natural England survey wanted to see more nature reserves on Green Belt land, rating this higher than any other option given, including farming, new parks, or woodlands.

Summary

The value of Green Belt for nature conservation can be assessed on the extent and condition of priority habitats, protected sites and species. Priority habitats are well represented across Green Belt land although there are fewer Sites of Special Scientific Interest and they are in a less favourable condition than much of England. SSSIs in Green Belt areas tend to suffer from slightly different risks with more under grazing and inappropriate scrub control, and less from water pollution from agricultural run-off.

Some species are surviving well and better than in other parts of England including birds such as the mistle thrush, song thrush, starling, and butterflies such as the dark green fritillary.

However, major pollution incidents such as agricultural waste discharge and atmospheric emissions do appear to be a particular problem in the Green Belt.

Is Green Belt land achieving the land use objectives for nature conservation?

Green Belt land is contributing to the healthy ecosystems which underpin many natural processes supporting a range of services including pollination, soil fertility, flood defence, air filtration and carbon capture and storage. Without the Green Belt designation it is likely that a proportion of this land would have been lost to urban development and associated infrastructure. Green Belt landscapes have been fragmented by development in a number of locations over time, however, and there may be a correlation between this and the relative lack of large and/or nationally important nature conservation sites. Green Belt land needs to be recognised as an integral part of ecological networks, forming healthy, functioning ecosystems to benefit wildlife and the people who live in adjacent towns and cities. A more detailed understanding is needed of areas where Green Belt landscapes are fragmented or disturbed by urban development.

Walthamstow Marshes, Lee Valley
© Natural England

Chapter 7

Thriving farming and forestry

Thriving farming and forestry

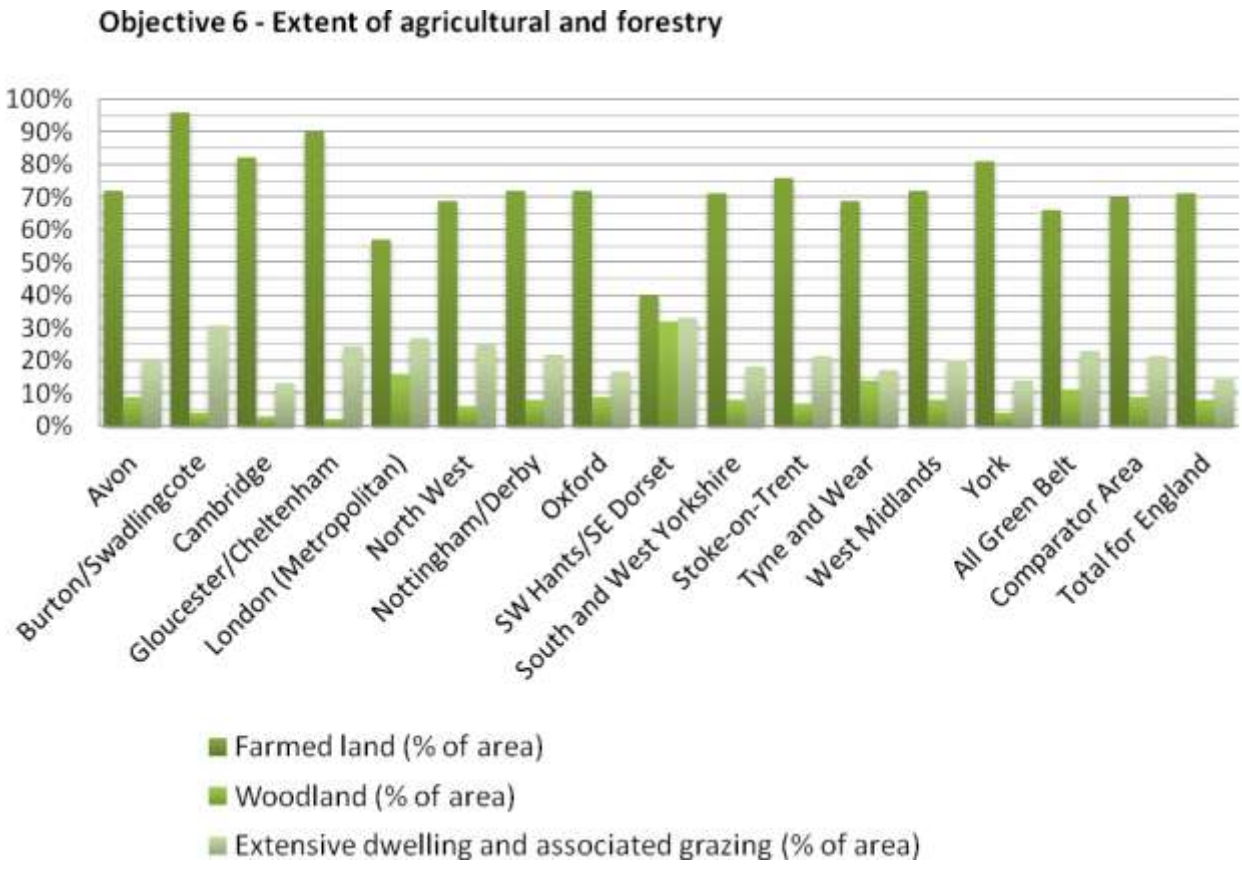
Introduction

This chapter reviews the contribution Green Belt land is making to the positive land use objectives in PPG2 relating to Objective 6: retaining agriculture, forestry and related uses.

Agricultural land

A high proportion of Green Belt is classified as being in agricultural production with 66% (just over a million hectares) recorded as farm land for EU subsidy purposes (Table 20a). This is slightly less than the figures for England as a whole (71%) and the Comparator Areas (70%). This does not indicate that all of this land is in productive agricultural use. Farming in the Green Belt is often seen as a particularly marginal economic activity as it can be more likely to face a range of additional problems including damage due to trespass, vandalism and fly tipping, which give rise to additional operating costs [64]. These problems in turn reflect wider societal issues.

Figure 23 – Extent of agriculture and forestry in the Green Belt



Data source: Agricultural land from Rural Land Registry; Woodland from National Woodland Inventory; Extensive dwellings and associated grazing from University of Sheffield.

[64] See, for example, Country Landowners & Business Association (CLA), A Living, Working Green Belt (2002), Royal Town Planning Institute, Modernising Green Belts – A Discussion Paper (2000), and London Assembly: Cultivating the Capital:. Food growing and the planning system in London, January 2010, p.31.

The number of farm holdings within the Green Belt has continued to decline, reflecting the overall national trend (Table 20b). Of the 208,166 registered agricultural holdings (both main and minor) in England, 14% are within Green Belt land. Analysis of the holding size reveals that within the Green Belt proportionally more holdings are below 100 hectares. The profile of holdings in the Comparator Areas does not vary in the same way.

The profile of holding tenure in the Green Belt is similar compared to the country as a whole. Within the Green Belt 63% of holdings are classed as owned and 14% as rented (the rest being mixed or of unknown tenure) compared to 64% and 13% nationally (Table 21).

In terms of the farmed environment, with a few exceptions, the proportion of land given over to the major farming types – cereals, dairy, grazing and mixed in Green Belt is broadly similar to the wider countryside (Table 22). Overall there are fewer agricultural animals per area of farmed land within the Green Belt compared to the national figure, but there is significant difference between types of livestock (Table 23). Since 1990 compared to other parts of England there has been a significant decline in specialist pig and poultry farming. Within the Green Belt the density of 'other' livestock (horses, goats, farmed deer, donkeys and llamas) is almost twice as high: 0.08 head per hectare compared to 0.05. The density of cattle is similar whilst densities of sheep, pigs and poultry are lower within the Green Belt.

Quality of agricultural land

Land classified as agricultural is graded to indicate the quality of the land in terms of its use for farming[65]. The proportion of both Grade 1 and Grade 2 agricultural land (the best and most versatile[66]) in the Green Belt is 12% which is directly in proportion to the area of land Green Belt covers (Table 24).

A particular concentration of this land is found in Cambridge (64%), York (30%) and the North West (22%). In the last of these the land is concentrated in an area to the north of Liverpool[67]. The Green Belt has proportionally slightly more land of Grade 3 and 4 quality. The Comparator Area follows a similar pattern although has less Grade 1 land than other areas (7%).

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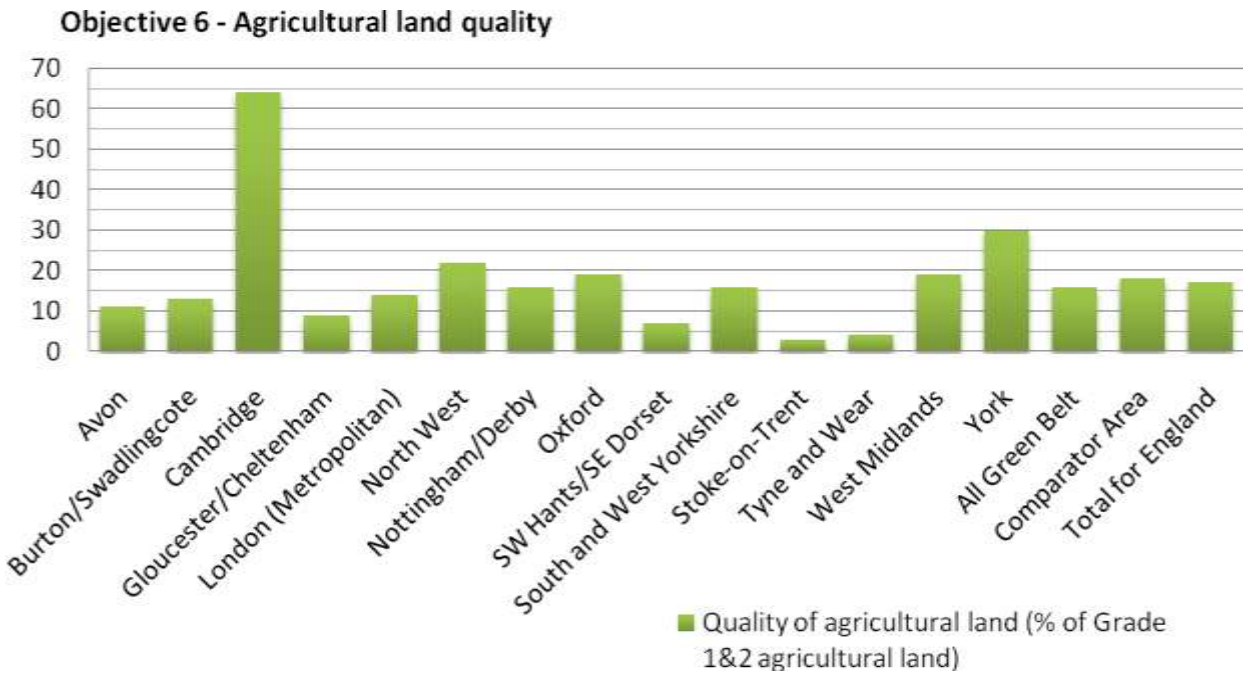
[65] Agricultural Land Classification data.

[66] For the purposes of this study we have not included Grade 3a agricultural land within the figures for best and most versatile land, although it falls within the definition of 'best and most versatile' given in paragraph 28 of Planning Policy Statement 7. It has not been possible to disaggregate figures for Grade 3a land (which is considered best and most versatile) from Grade 3b (which is not considered best and most versatile).

[67] See mapping available on Multi-Agency Geographical Information for the Countryside (www.magic. gov.uk).

Figure 24 – Agricultural land quality



Agri-environment schemes

Agri-environment schemes provide financial support for environmentally beneficial land management. They were first introduced in the late 1980's and the original Classic schemes[68] have now been replaced by the Environmental Stewardship Scheme[69].

The thinking behind the schemes reflects the wider shift in agricultural policy from supporting production towards achieving a range of environmentally beneficial outcomes. It also assumes that agricultural land should be 'multifunctional' or capable of integrating different uses such as food production, nature conservation and/or public access into the same space and over time[70].

Agricultural land can be entered into Environmental Stewardship at two levels: Entry Level Stewardship (ELS), including Organic Entry Level, is aimed at delivering environmental benefits through widespread uptake of some basic management options, whilst Higher Level Stewardship (HLS) provides a more targeted and tailored approach involving more complex environmental management and greater environmental benefits in return for payment. HLS agreements cover only 16% of the land in agri-environment schemes, but the financial value of the agreements is higher. Figure 25, below, shows the distribution of Environmental Stewardship funding and Green Belt distribution.

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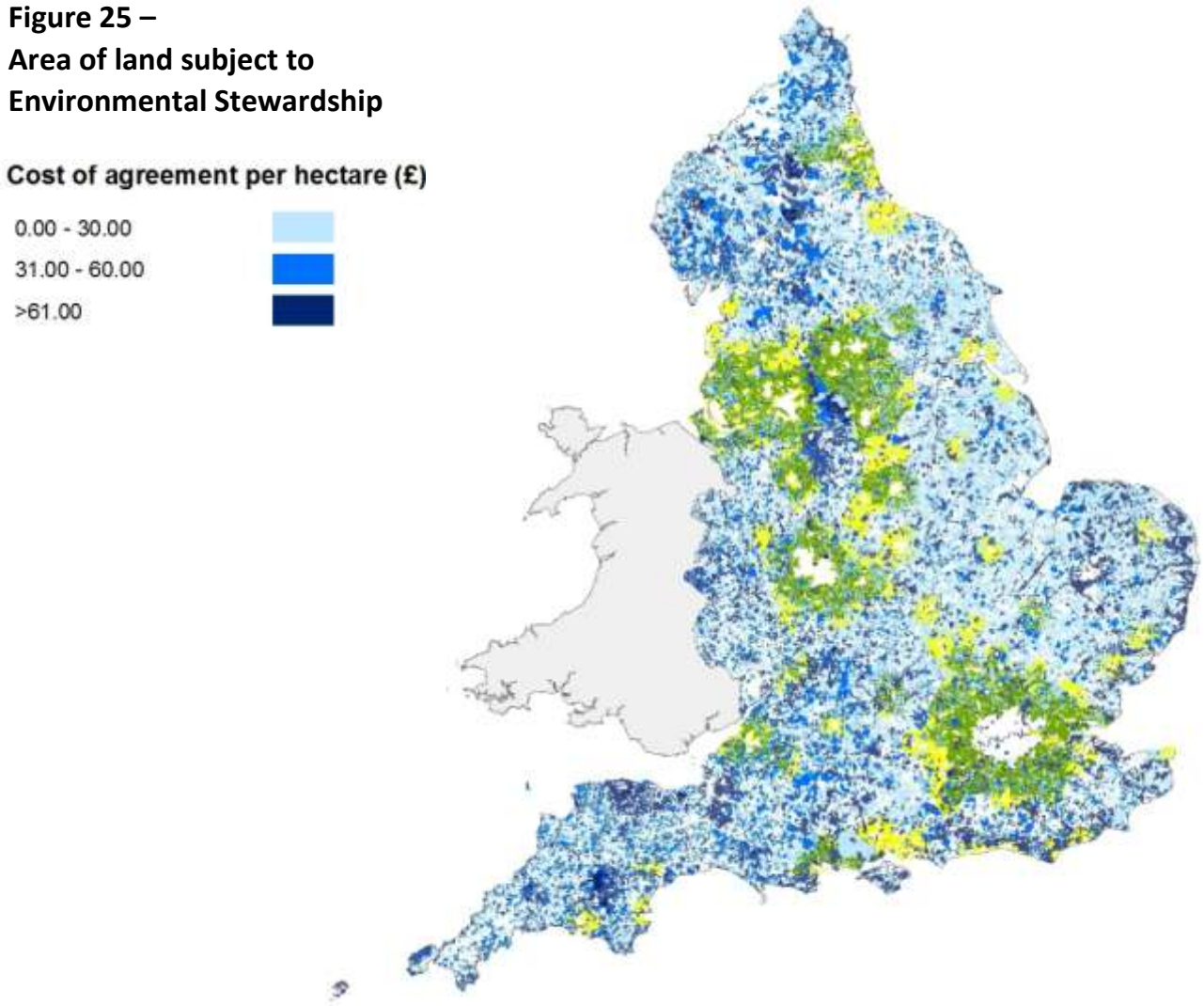
[68] Agreements under the original schemes, such as Countryside Stewardship or Environmentally Sensitive Areas will be in place until 2015 when the last expires or is renewed.

[69] A funding scheme using European Union agricultural funds to support farmers in meeting a range of environmental objectives to improve biodiversity, protect historic heritage and landscapes. It also supports access to the countryside.

[70] Gallent N, Juntti, S, Kidd, S & Shaw, D: *Introduction to Rural Planning*, Routledge, 2008, p.22-23.

Figure 25 –
Area of land subject to Environmental Stewardship



The proportion of Utilisable Agricultural Area (UAA) which is Green Belt land and managed under agri-environment schemes is 53%, considerably lower than the 67% for all England and also less than the 60% coverage of Comparator Areas (Table 25). There are variations between individual Green Belts with 73% of Cambridge and 70% of Oxford with agreements compared to just 40% of Stoke-on-Trent and 44% of South and West Yorkshire. Overall 10% of Environmental Stewardship agreements are within Green Belt indicating a slightly lower uptake compared to the national picture. Nine percent are within the Comparator Areas. Green Belt has a much higher proportion of land subject to HLS agreements (21% within Green Belt) but only 10% of the ELS. The proportion of land subject to the more recently introduced Environmental Stewardship scheme is 39% for the whole of England, 31% of Green Belt and 35% of the Comparator Areas.

The amount of land subject to Higher Level Stewardship agreements, which necessarily involve a long-term commitment to the land, is significant in terms of the need for Green Belt boundaries to be 'permanent' as PPG2 requires. The idea that 'permanence' of Green Belt should be something longer than the next plan review (see Chapter 1) is relevant to the former Ministry of Agriculture, Fisheries and Food's stipulation that it would not invest in agricultural land that had no guarantee of protection for more than 10 years[71].

[71] Martin Elson, 'Green Belts: Conflict Mediation on the Urban Fringe', Heinemann 1986

Figure 26 – Percentage of Utilisable Agricultural Area subject to Agri-environment schemes in the Green Belt compared to all England and urban fringe comparator areas.

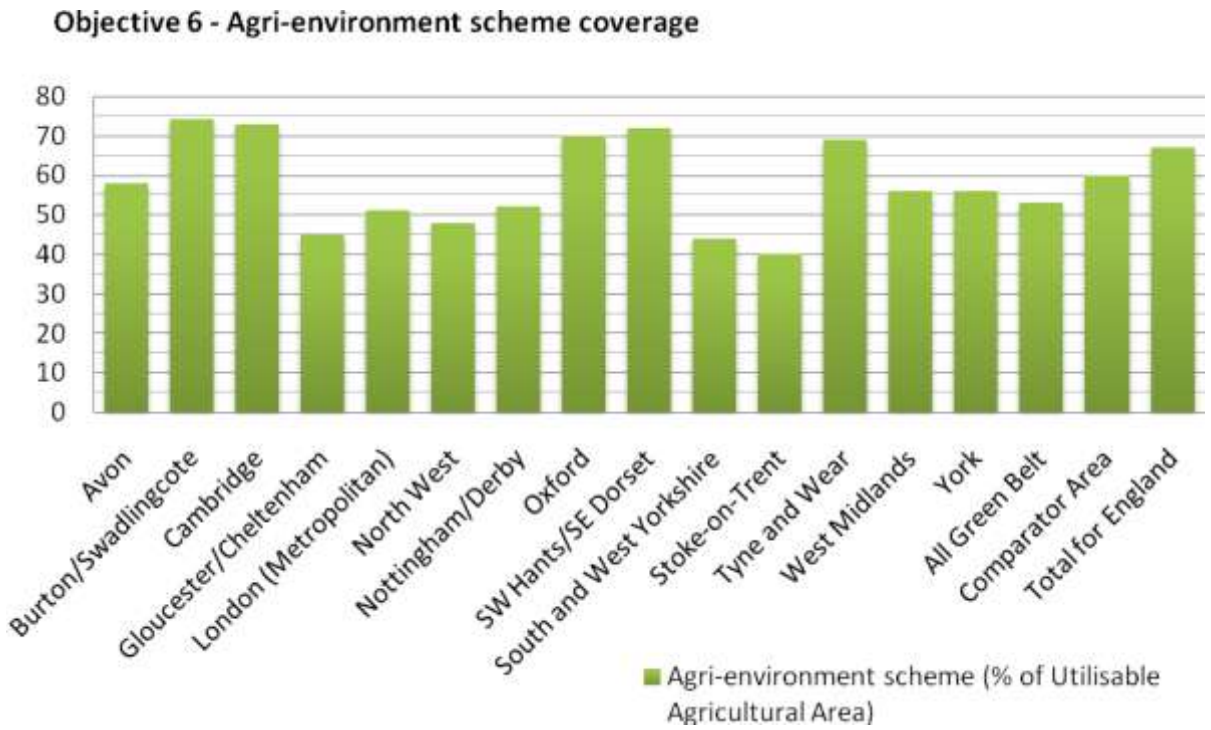
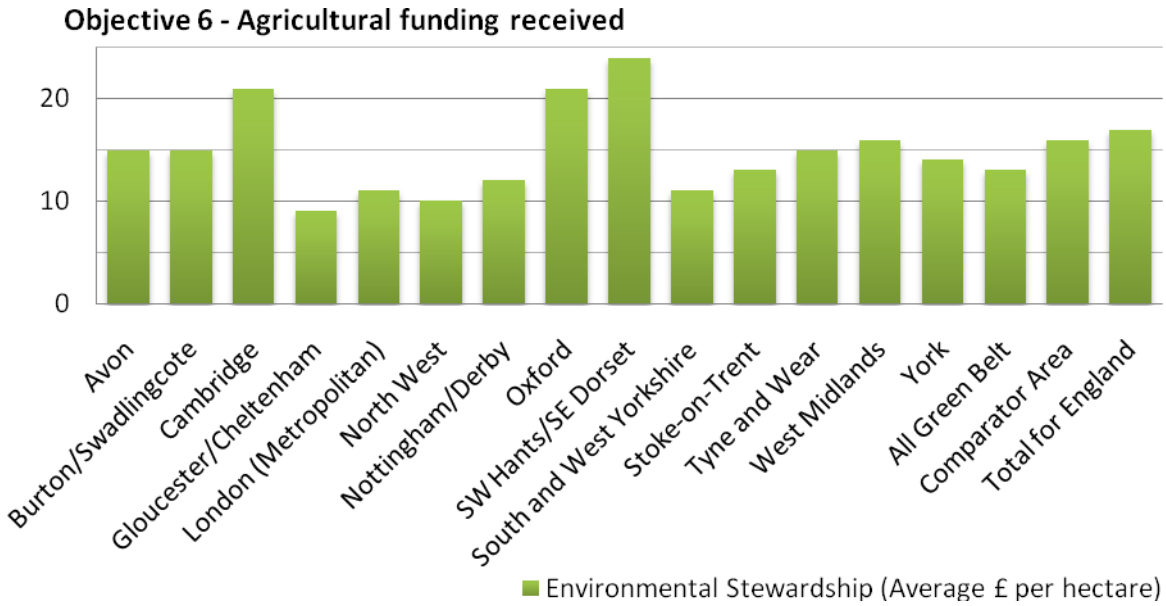


Figure 27 – The amount of Green Belt land covered by Environmental Stewardship schemes compared to all England and the urban fringe comparator areas.



The amount of money provided to Green Belt areas through Environmental Stewardship also tends to be lower than for all England. The average spend per hectare[72] for England is £17, for Green Belt it is £13 and for the Comparator Area £16. The figures for all Green Belt hide wide variation with more than average levels of funding attracted to Hampshire and Dorset (£24), Oxford and Cambridge (both £21)

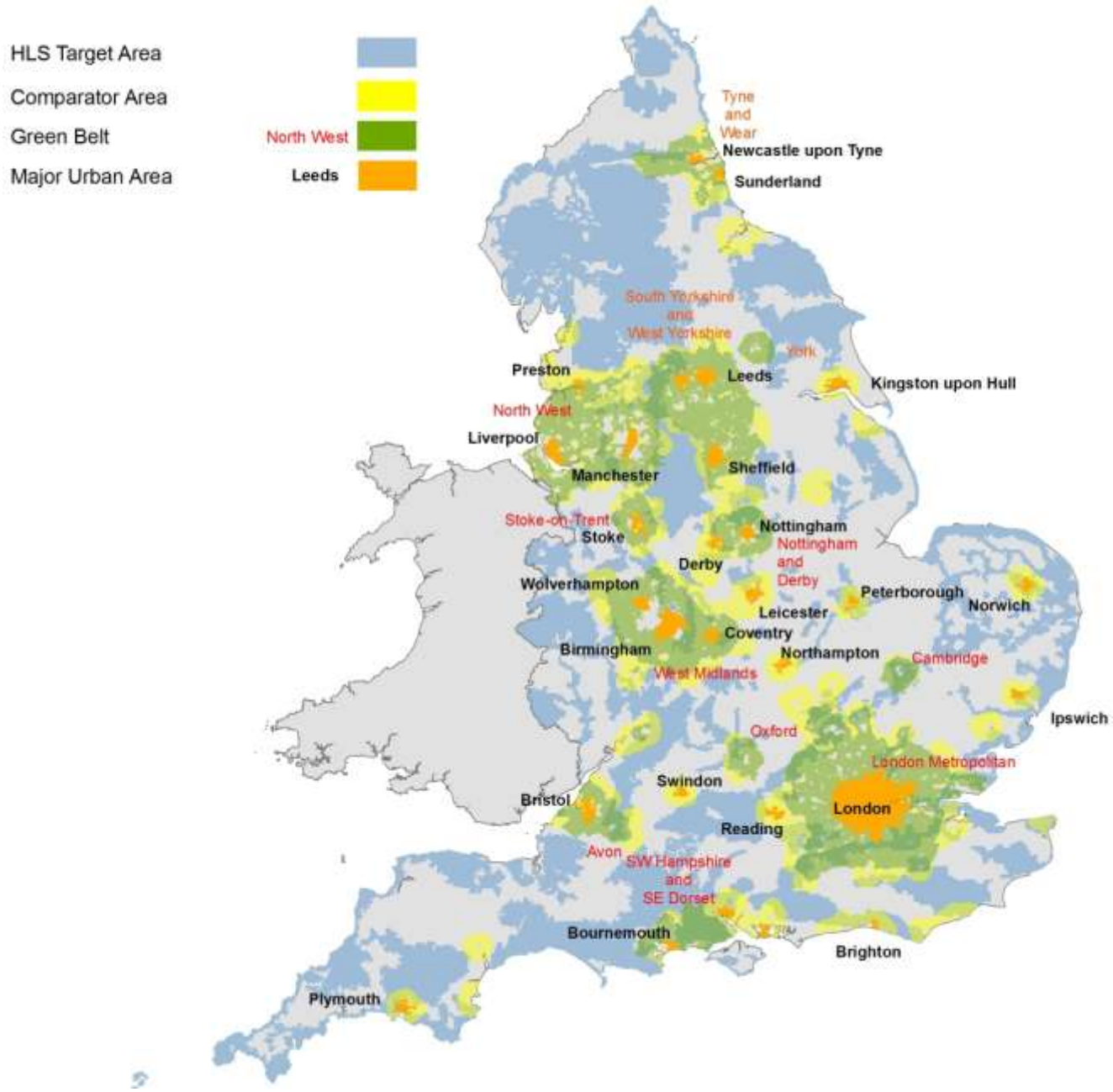
HLS also offers an option for farmers to apply for funding to support educational visits. 14% of these are taking place in Green Belt areas and 11% in comparator areas (Table 10).

Targeting agri-environment schemes

Natural England has identified priority areas for delivery of the HLS scheme's multiple objectives (Figure 28). The target areas cover 22% of Green Belt land, 31% of the Comparator Areas and 36% of England (Table 26). Target areas have been defined by a systematic and integrated analysis of a range of datasets describing environmental quality and potential across all of the scheme objectives; for example data on habitat distribution, ranges of species of conservation concern, access provision, historic environment features and resource protection. The target areas therefore represent a holistic assessment of environmental quality and potential. The lower coverage within Green Belt areas suggests lower environmental quality and potential for schemes to deliver outcomes. There are significant variations between individual areas.

[72] This is the total spend divided by the total area

Figure 28 – Green Belt and Higher Level Stewardship targeting

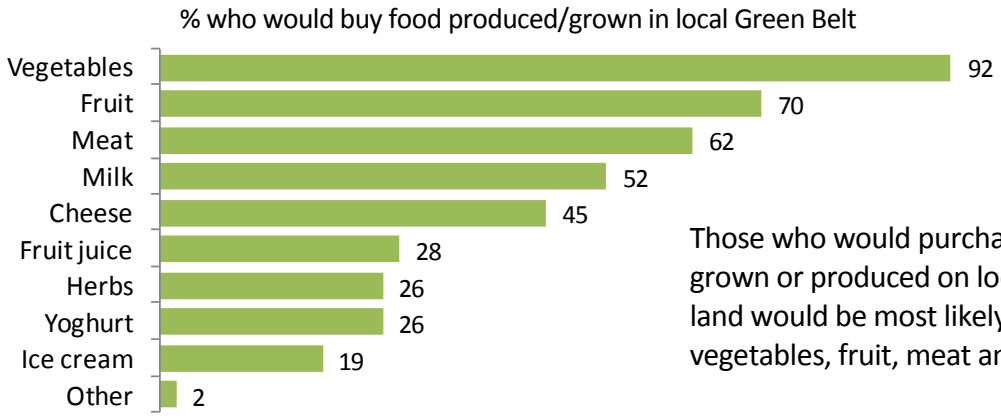


Public, land manager and professional views on agriculture and forestry

The national survey work carried out for this project found that there is strong public support for buying more food produced in the Green Belt which surrounds them. Eighty percent of respondents said that they would buy food grown or produced in the Green Belt rather than food produced elsewhere. Interest levels were highest amongst those aged 35 to 64 and those in the AB socio-economic groups. Of the activities people would like to undertake more of in the future, buying food grown or produced in the Green Belt was supported by 21% and was third of eleven options behind visiting for a day out and quiet recreation.

In terms of the type of food that these people would buy, vegetables were by far the most popular option at 92%. The local surveys showed that in addition to vegetables the opportunity to buy more local fruit, herbs and meat would also be welcomed.

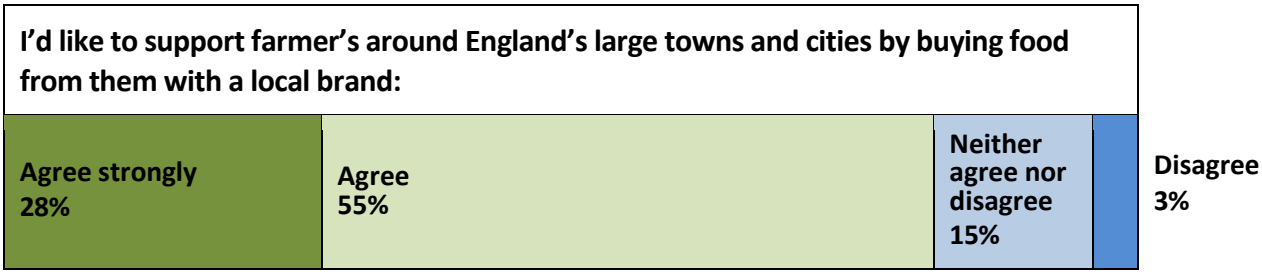
Figure 29 – The types of food produced in a local Green Belt that respondents would be most interested in buying?



Those who would purchase food grown or produced on local Green Belt land would be most likely to buy vegetables, fruit, meat and milk.

Respondents to the national survey were also asked to agree or disagree with a statement about supporting farmers by buying food grown in the Green Belt and 83% agreed. Those that strongly agreed were mostly aged over 55, in socio-economic group C1 and living in the South East.

Figure 30 – Attitudes expressed in surveys to buying local food from farmers in the Green Belt



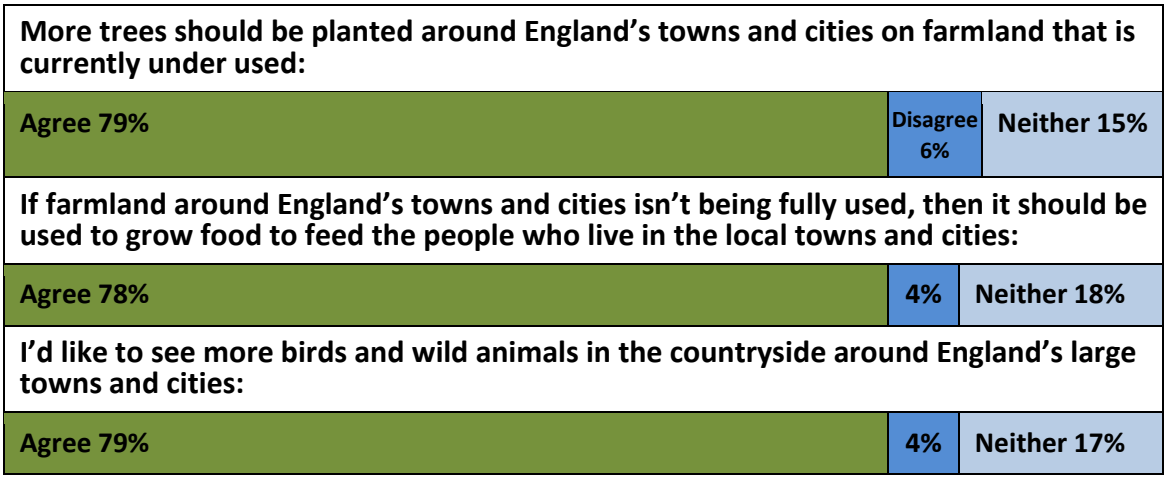
The local surveys of land managers and other professionals revealed that over two thirds of landowners agreed that marketing food grown or produced in the Green Belt with a local or 'Green Belt' brand had business potential.

Figure 31 – Land manager and professionals views on potential to market food grown in the Green Belt with a Green Belt brand.

		strongly agree	agree	no opinion	disagree	response count
I think there is business potential in marketing or selling food branded as being from the Green Belt or the countryside around X	London	12 (41.4%)	8 (27.6%)	5 (17.2)	4 (13.8%)	29
	Bristol	4 (21.1%)	8 (42.1%)	3 (15.8%)	4 (21.1%)	19
	Mersey	4 (36.4%)	3 (27.3%)	1 (9.1%)	3 (27.3%)	11

The national survey sought responses to three statements about future uses in the countryside around towns generally (not just Green Belts) which relate to agricultural and forestry land (Figure 32).

Figure 32 – Attitudes to changes in land use in the urban fringe



These findings suggest that the public support the multifunctional ethos of Environmental Stewardship schemes as explained above and would like to see the countryside around towns become more multifunctional, combining agricultural production with other public benefits.

The suggestion of community growing schemes was also put forward for consideration in the local surveys. This received strong support from the public and more than two thirds of land managers and other professionals agreed it was a good idea. However, few land managers were prepared to offer land for such as scheme, preferring instead to offer support in other ways.

Farm diversification in the Green Belt

Concerns about diversification were raised by a number of the landowners and land managers surveyed or interviewed for this project. Farming in the UK and elsewhere has had to address the issue of falling economic returns for some years[73].

Green Belt planning policies are also believed by some to hinder development that enables farmers to diversify their activity[74]. The evidence available, however, paints a more complicated picture, and suggests that Green Belt locations may in fact be encouraging rather than hindering diversification. Nationally, according to data from 2004, 46% of farms have diversified into non-farming enterprises. In 1991 a study in the West Midlands found that two thirds of diversified farms in the region were located in Green Belt areas within 5 km of Birmingham and Coventry[75]. More recently, a 2005 survey for the London Development Agency (LDA) of farmers in the Green Belt area within the M25 found that, although planning was perceived as a barrier to further diversification, diversified enterprises accounted for almost a third of farm income, much higher than elsewhere in the country[76].

Research carried out for this project by the University of Sheffield also suggests that agricultural diversification is particularly prevalent in Green Belt areas. Farm shops are an important means for farmers to tap into a market for their produce, and were highlighted in a January 2010 report by the

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[73] N Gallent, J Andersson, & M Bianconi, *Planning on the Edge: The Context for Planning at the Rural-Urban Fringe*, Routledge 2006, p.107, DEFRA 2004/5 Farm Business Survey figures.

[74] CLA 2002.

[75] Gallent et al 2006, p.107.

[76] ADAS, Farming in London's Green Belt, 2005, p.7 at 5.7.

London Assembly, which called for more support for agriculture in Green Belt areas within London[77]. Our research found that there are 50% more farm shops per 1,000 households in the Green Belt than in the comparator areas, and five times more per 1,000 households than in the rest of rural England (Table 9).

Newton St Loe from the South. © Nick Mould

The Duchy of Cornwall's estate to the south west of Bath is an example of landowners and land managers diversifying their holdings in the Green Belt to host a wide range of activities including tourism accommodation and offices for small businesses, while continuing to farm to high standards.

The evidence from a range of studies indicates that few farm diversification activities relate to benefits to the environment and people. In urban fringe areas (including Green Belt land), diversification is less likely to take the form of recreation or tourism and more likely to involve offices, haulage, storage or manufacturing[78]. Similarly the LDA study found that respondents saw limited potential for diversifying into more sustainable land management practices or environmental improvements[79]. The survey work carried out for this review shows, however, a growing level of public interest and potential support for activities that make use of Green Belt land in an environmentally sustainable manner, such as local food production, re-wilding, and educational visits, but the landowner survey responses indicate that they are not confident of the practicalities and viability of diversifying in this way.

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[77] Greater London Assembly, Cultivating the Capital: Food growing and the planning system in London, January 2010, p.23 and 28/9. Accessed from www.london.gov.uk on 11 January 2010.

[78] Land Use Consultants with the University of the West of England and the Royal Agricultural College The Implementation of National Planning Policy Guidance (PPG7) in Relation to the Diversification of Farm Businesses, DTLR 2001.

[79] ADAS 2005, p.13.

Green Belt Case Study

The Coton Countryside Reserve Project is a new and innovative wildlife and farm reserve being created by 'Cambridge Past, Present & Future' in the west of Cambridge's Green Belt. Starting in 2004, the project is demonstrating how a working farm can provide greater ecological diversity and also provide improved public access.

In the 1930s Cambridge PPF purchased farm land on the west edge of Cambridge to prevent the sprawl of the city in what is now Green Belt Land. In 2003 planning permission was granted for the Coton Countryside Reserve that comprises of a 120 ha farm, currently tenanted by Cambridge University Farm. The Reserve attracted funding from a number of sources including central government, local authorities, landfill tax and local people and companies.
The countryside reserve has a Countryside Stewardship Agreement with Natural England.

The Project is already providing

- More diverse wildlife habitats including woodlands, hedges, hay meadows and an orchard.
- A change in farming practices to provide greater wildlife enhancement.
- New access routes for those on foot, wheel or hoof.
- New disabled access routes.
- Linkages with adjacent public routes.
- Volunteering opportunities.
- Links to the health agenda by encouraging more people to access their local countryside and engage in exercise and sport.
- Education and community benefits for local people through the volunteering and events programme.

And the future?

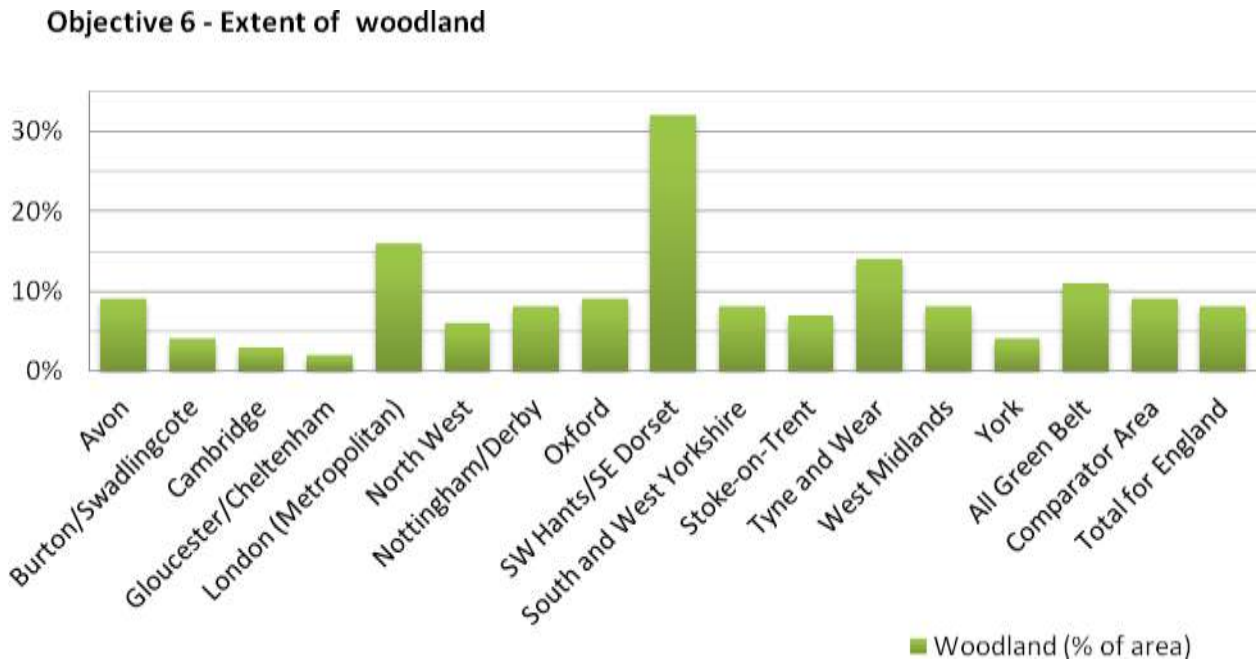
- A Reserve Centre and additional signage.
- New rustic seating suitable for less mobile visitors and an informal fitness trail.
- Further access links to Coton village and improved connection with the city including sustainable transport links.
- Creation of wildlife management plans.
- Further habitat improvements – especially the riverine corridor and other wetland habitats.
- A Farm Ranger to help with environmental management and educational activities.

CAMBRIDGE PAST, PRESENT & FUTURE
Formerly Cambridge Preservation Society

Forestry land

The National Woodland Inventory records 11% of Green Belt as woodland. For all England woodland cover is 8% and for the Comparator Areas it is 9%. The coverage varies considerably between Green Belts with the most woodland found in the combined South West Hampshire and South East Dorset Green Belt (32%)[80], London (Metropolitan) (17%), and Tyne and Wear (14%). The highest proportion of this woodland is broadleaved (Table 27 and Figure 33) and the Green Belt has a high share of coppice woodland with 19% of the total coppice in England found in the Green Belt and 17% in the Comparator Areas. The vast majority of this is in the London (Metropolitan) Green Belt (Figure 34).

Figure 33 – Percentage of Green Belt land with woodland



Community Forests

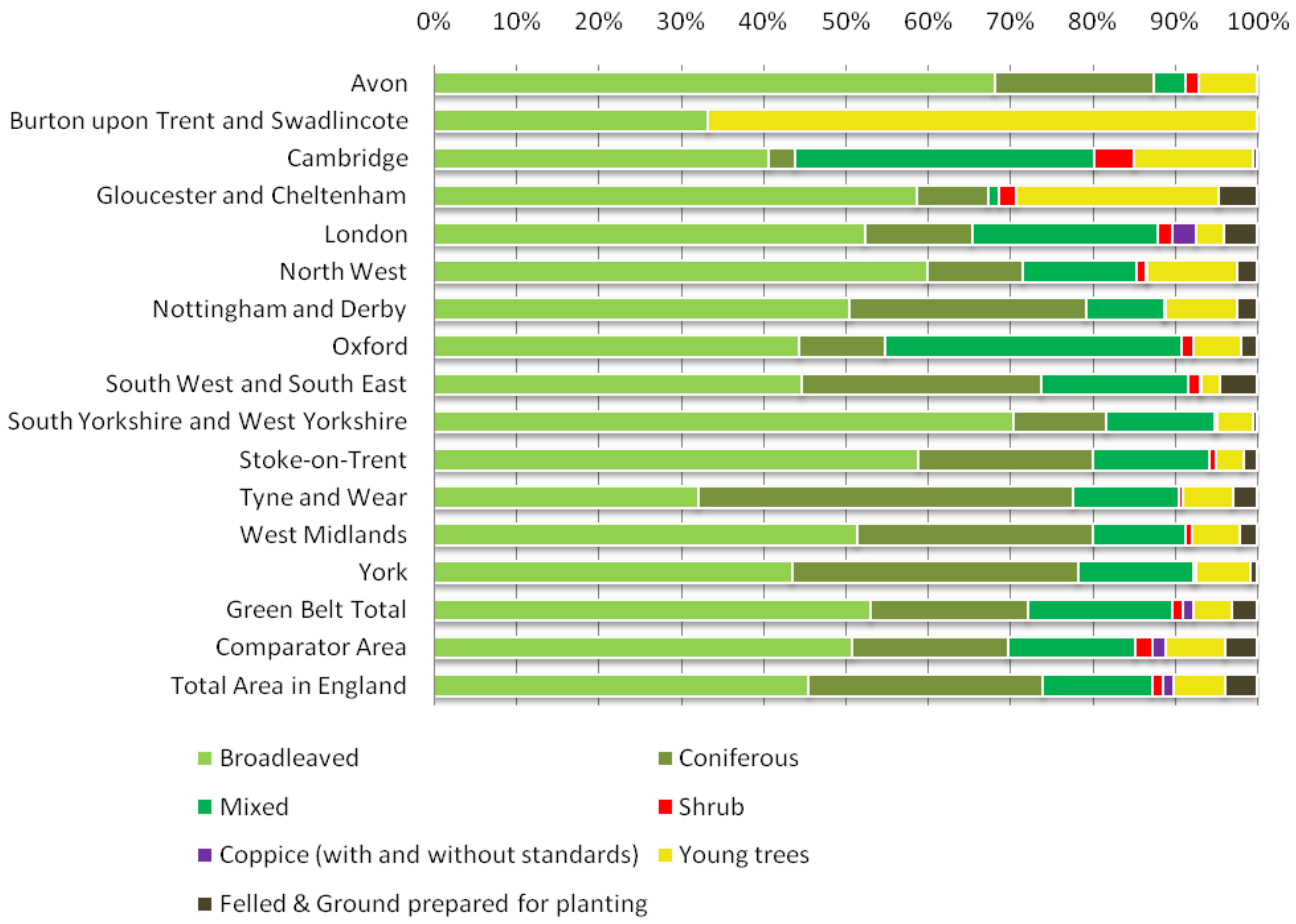
Community Forests aim to deliver urban, economic and social benefits by revitalizing derelict land to create high quality environment for millions of people. There are twelve Community Forests across England covering nearly 500,000 hectares of land which is just under 4% of England (Figure 35). The founding basis for each Forest is a government approved forest plan – a 30 year vision of landscape scale improvement. Although there is a focus on planting more trees in the areas, the areas will have a variety of land cover types and uses apart from forestry. The Community Forest programme, managed by the Forestry Commission, is a partnership of public, private and voluntary sector with a remit to cover a specified area of land, most (but not all) of which is classed as being in undeveloped use. Although the areas are not all forested there is a focus on creating woodland on land considered derelict or previously developed, while keeping good quality agricultural land in agricultural use. Such woodland has multiple benefits for the public in terms of an attractive setting for recreation and an absorber of urban heat, but can also be used for purposes of nature conservation, school field study, and fuel, for example.

Six Green Belts have Community Forests and in total these cover over 200,000 hectares which is 41% of the total Green Belt land area. A further 18% of Community Forests lie within the Comparator Areas. Of

[80] Includes the New Forest which is no longer Green Belt land

the six Green Belts with Community Forest, Avon has the largest proportion of land covered (53%), followed by Nottingham and Derby (36%) and the North West (30%) (Table 28).

Figure 34 – Woodland types in Green Belt areas



For more than a quarter of a century Community Forests have been a key mechanism for regenerating urban fringe areas and a recent evaluation found that they had been successful in improving Green Belt land that they covered[81]. A number of areas of the Green Belt which historically contained extractive or other industries, such as Lancashire, South Staffordshire, South Yorkshire, and the eastern fringe of London, have been significantly transformed with the establishment of the Community Forests and other land reclamation initiatives.

Despite this, the programme faces significant challenges. Community Forests are expected to become more independent of central Government funding. The work of the Community Forests is long-term and achievements are often not readily visible and this has led to difficulties in maintaining support from partners[82]. A case in point is the Forest of Avon, whose remit covers the countryside around Bristol. At the time of writing the Forest had been forced to wind up its partnership due to the withdrawal of support from local authorities in the region.

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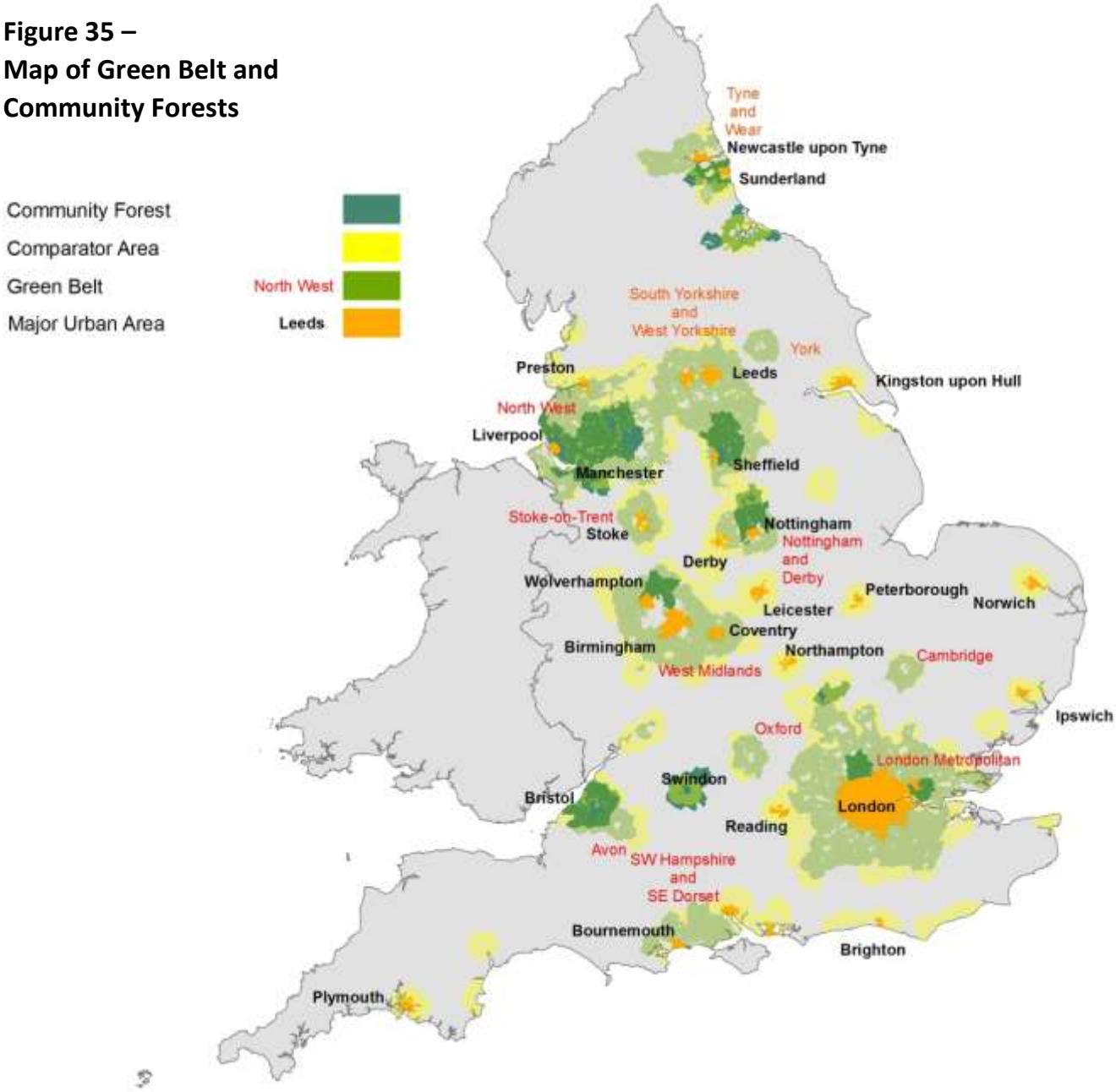
[81] Land Use Consultants with SQW: Evaluation of the Community Forest Programme, final report for Countryside Agency, March 2005, paragraphs 3.5 to 3.13

[82] Land Use Consultants with SQW 2005, paragraph 3.13.

Community Forests – Headline achievements [83]

- More than 27,000 hectares of existing woodland brought under management
- Over 10,000 hectares of new woodland planted
- 12,000 hectares of other habitats created or improved
- 1,200 kilometres of hedgerows planted or restored
- 16,000 hectares of woods and greenspace opened up for recreation and leisure
- More than 4,000 kilometres of recreational routes restored and created
- Many thousands of local events and activities
- Over £175 million of new investment in creating better places

Figure 35 –
Map of Green Belt and Community Forests



[83] Quality of place, Quality of life: England's Community Forests, http://www.communityforest.org.uk/resources/qop_qol.pdf

Encouragingly, however, a significant proportion of the public appear to be prepared to get involved in the work of either the Community Forests or the Country Parks (see Chapter 4). The three local surveys revealed that between 70 and 90% of the public had heard of the Community Forest in their area, and over 60% of respondents (600 people) were willing to either become further involved in their local Community Forest or Country Park, or to maintain their existing involvement. This suggests that involving the Community Forests more in the planning process, such as through the preparation of a Green Belt Management Strategy, could help to gain the public support they need to sustain their activities.

Alongside Community Forests, significant work is being done by non-governmental organisations. The Woodland Trust has embarked on a major project in the Green Belt near St Albans in Hertfordshire, aiming to plant 600,000 trees within 15 miles of two million people[84].

Summary

The extent of agricultural and forestry land remains high in Green Belt and overall 93% remains undeveloped. A significant area (23%, compared to 14% for England) of land in the Green Belt is neither registered for agricultural use nor is it woodland. This land is made up of such uses as small paddocks, small holdings and extensive gardens.

The majority of Green Belt is categorised as farmed land or woodland. In terms of farm type and quality of land it is similar to much of England, although with a slight overall tendency towards smaller holdings and less mainstream activities. The quality of agricultural land in the Green Belt matches the pattern across the rest of England but with vast differences between Green Belt areas. The proportion of Green Belt land subject to agri-environment schemes is lower than for all England (53% of Utilisable Agricultural Area compared to 67% in England and 60% of the Comparator Area). The funds invested in Green Belt through agri-environment schemes are slightly lower compared to the rest of England but again with big differences between Green Belt areas. The evidence suggests that planning controls have not impacted on the ability to diversify within the Green Belt.

11% of the Green Belt is woodland, a significantly higher proportion than for the Comparator Areas or England as a whole. Half of the twelve Community Forests in England coincide with Green Belt areas and Green Belt land accounts for 41% of the total area of Community Forest. These have provided a way of managing and regenerating areas, particularly those affected by former extractive industries, and have brought together partners to attract investment to the areas.

Is Green Belt land achieving the land use objectives for agriculture and forestry?

Overall the extent of agricultural and forestry land remains high in Green Belt areas which suggests the objective is being achieved. There are doubts about the productiveness of some of the land classified as undeveloped and there are big differences between the Green Belt areas in this regard. The national and local surveys undertaken for this review revealed that the public are interested in buying food produced locally in the Green Belt and many would like to see more trees planted and more locally grown food in the areas around towns and cities. A significant number would also like to be more involved with their local Community Forest or Country Park. With the new challenges of climate change and population growth Green Belt land could play a more valuable role in this regard.

[84] *Country Life*, 28 July 2008.

Chapter 8

New challenges for Green Belt land

New challenges for Green Belt land

Introduction

This chapter looks at the new challenges to Green Belt land and seeks to address whether it is fit to meet these.

New challenges, new expectations

The land around our towns and cities is continually facing a range of challenges and conflicting land use priorities. Decisions involve weighing up a number of social, economic and environmental factors and include questions about the number of houses needed, the distribution of infrastructure, facilities and services; the amount of open space desirable to provide healthy lifestyles and quality of life; protection of important habitats, landscapes and historic features; and the provision of jobs and schools. With the passing of the Climate Change Act 2008[85], and a new overall statutory purpose for spatial planning to address climate change, this is an important factor to add to the list.

Green Belt policy has provided a framework for making some of these decisions around those towns and cities with the planning designation in place. It is a simple framework that assumes that urban areas need open space and breathing spaces around them – for that to happen, the form and size of urban areas should be contained. If not, urban development would sprawl and settlements would become too big and lose their historic character. The policy has defended against this successfully.

But there are new challenges in the 21st century, and new expectations. England's population has grown, and is projected to continue to grow. It is recognised that people benefit from having access to green spaces within a short distance from where they live[86]. Quality places they can visit without driving or a long journey by public transport to get there will be in greater demand. Outdoor spaces that not only provide opportunities for exercise, relaxation or social activity, but which also provide a broad range of environmental benefits and ecosystem services. To tackle these challenges and expectations on England's finite area of land a multi-functional approach, combining different land uses in the same space, is required to plan and manage Green Belt.

Climate change mitigation and adaptation

The speed and scale of climate change requires action now[87]. The evidence that the Earth's climate is changing as a consequence of human activity is strong and accepted by an overwhelming majority of scientific opinion. The changing climate is beginning to have an impact on England's ecosystems and this impact is predicted to increase and accelerate in the future.

Responding to the challenge of climate change includes two distinct elements, usually referred to as mitigation and adaptation. Mitigation includes measures which reduce greenhouse gas concentrations

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[85] http://www.opsi.gov.uk/acts/acts2008/ukpga_20080027_en_1

[86] Dr Richard Mitchel and Dr Frank Popham, Effect of exposure to natural environment on health inequalities: an observational population study, The Lancet Vol 372, Issue 9650, pp1655-1660

[87] England biodiversity strategy climate change adaption principles, Defra, 2008

in the atmosphere. Land use and management can make a contribution to this, for example, by increasing the uptake of carbon dioxide by vegetation and the subsequent incorporation of carbon into the soil. Adaptation is the process of adjustment by which systems – both natural and human – are enabled to continue to function in a changed climate.

Research has shown that semi-natural and agricultural ecosystems can contribute to climate change mitigation, principally by increasing the amount of carbon stored in soils and trees. This depends on appropriate management but many of the measures that deliver an attractive landscape, such as planting trees and establishing or maintaining flower-rich meadows or wetlands, deliver climate change mitigation benefits. This has not been quantified for the Green Belt where there is almost certainly scope to develop mitigation benefits further.

Plants absorb carbon dioxide from the atmosphere and lock it away. The longer the plants live, the greater the amount of carbon is stored. Particularly valuable for carbon storage are mature woodland, standing grassland (such as meadows, green verges and lawns with well-developed root systems), areas densely planted with perennial plants and undisturbed peat. The amount of woodland in the Green Belt has been discussed in Chapter 7. In addition to this, the semi-natural grass (14% of the Green Belt area) and improved grassland (23% of the Green Belt area) present in the Green Belt are potentially vital resources for carbon storage (Table 1a).

Semi-natural ecosystems can also contribute to the adaptation of society to climate change. Hotter summers are predicted to cause an urban heat island effect for towns and cities leading to detrimental effects on air quality, summer electricity demand for air conditioning, and comfort in city buildings and transport networks. A recent study of Greater Manchester suggests that undeveloped Green Belt areas around the city have particularly high proportions of surfaces allowing evapotranspiration[88] which can contribute to cooling urban areas[89].

Climate change is also expected to bring wetter winters and more extreme rainfall episodes[90], increasing flood risk. There is good evidence that wetlands within flood plains can reduce flood risk. They are also beneficial in maintaining water supplies through summer droughts – which are also likely to become more frequent in future.

Currently, in the Green Belt overall there is less land at risk of flood than other parts of England – 8% compared to 11% in both the Comparator Area and all England (Table 29). Oxford is the only Green Belt with a much higher risk (21%) and all others are close to or much lower than the average. However, the fundamental question is whether Green Belt has a role to play in reducing flood risk in the future in the nearby urban areas and whether it is equipped to do this.

Adapting conservation strategies to climate change has been the subject of much recent research and debate and guidelines have been published for conservation practitioners[91] and wider audiences under

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[88] Evapotransporation is the the loss of water to the atomosphere by evaporation, or by transpiration through pores in the leaves of plants which can be substantial.

[89] Gill, S; Handley, J; Ennos, R; and Nolan, P: 'Planning for Green Infrastructure: Adapting to Climate Change', in Davoudi, S et al (ed): *Planning for Climate Change – Strategies for Mitigation and Adaptation for Spatial Planners*, Earthscan 2009, p.251-2.

[90] UKCP09 projections

[91] Hopkins et al, 2007

the England Biodiversity Strategy[92]. These make clear the importance of taking a landscape scale approach to planning for climate change mitigation and ensuring integration across sectors.

Green Belt land has helped to maintain features that support the resilience of ecosystems to climate change and it offers the potential for further enhancement. Ways to increase resilience include ensuring that areas of semi-natural habitats are sufficiently large to support robust populations of species and to be topographically varied enough to provide a range of environmental conditions (such as microclimates and soil moisture). Connecting patches of habitat to create ecological networks is therefore likely to improve species resilience as well as providing avenues that enable species to move across the landscape and find new suitable habitat.

Food and the Green Belt

Growing concern about food security in the face of climate change, global population growth and rising prices poses an increasing challenge to the view that much or most of England's agricultural capacity is no longer needed[93]. There has been an increasing interest in reducing transportation costs and distances involved in food production ('food miles'), as well as investing in land and skills to encourage good incomes for sustainable horticultural production, and ensuring access to fresh fruit and vegetables for deprived communities. For example, the Institute for Public Policy Research (IPPR), while not mentioning Green Belts directly, has recently stated strong support for planning policies protecting the best agricultural land, and called for 'more scope for the growing of fresh and perishable produce such as fruit and vegetables nearer to large centres of population'[94]. In January 2010 the London Assembly issued a report which called for food growing to be recognised as 'one of the most beneficial uses of land in the Green Belt' (London Assembly 2010, p.54).

A number of local initiatives in the Green Belt are taking up this approach.

From the three areas CPRE surveyed for this report, examples include:

- **Manchester's Unicorn Grocery** buying land at Glazebury near St Helens in order to begin production in 2010[95];
- **Cleeve in the Avon Green Belt** to the south of Bristol where a farmer is launching a 'customer-grower' scheme encouraging members of the public to grow their own fruit and vegetables on his land in return for buying his meat produce[96];
- **The Colne Valley Regional Park** in the Green Belt to the west of London, has a Rural Development Forum promoting local food production in the park and linking 15 farmers in the area with local markets through events and box schemes.

Alongside this 'pick-your-own' farming schemes are available at a number of Green Belt Country Parks such as Avon Valley Country Park between Bath and Bristol.

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92 Smithers et al, 2008

93 For the view that agricultural capacity is no longer needed see RTPI, Modernising Green Belts: A Discussion Paper, 2002.

94 Midgely, J: Best Before – How the UK should respond to food policy challenges, IPPR North June 2008, p.15.

95 Moggach, T: `Supermarkets? No thanks', The Guardian, 10 December 2008.

96 See *Bristol Evening Post,* 19 September 2008, `Carrot Crunch – Grow your own on my farm'.

Towards a low carbon economy

To achieve a low carbon economy will require changes in lifestyle. These would need to include the way food and fibre are produced and distributed; the way energy is provided; and how services, leisure activities, education and business are arranged spatially to be accessible, thereby minimising carbon emitting journeys. Technology and communications can support this, for example by allowing people to travel less for work, but may also contribute to greater dependency on energy supply.

Green Belt offers opportunities to contribute to climate change mitigation and adaptation and to supporting a low carbon economy through:

- local food production, with potential to reduce unnecessary food miles, to develop more self sufficiency and food security;
- planting trees and maintaining grassland to sequester carbon, filter air pollution and absorb heat, particularly in outer suburban areas;
- local sport and recreation with opportunities within closer range of homes and businesses to enjoy the natural environment without a car journey;
- renewable energy supplies such as from biomass, anaerobic digesters, wood, solar, water or wind;
- creating and managing more wetland to help people adapt to and relax in a changing climate, as well as restoring the functions of natural flood plains to flood safely, protecting homes and businesses;
- creating ecological networks to help species adapt to climate change and maintain healthy ecosystems, by linking the land designated as Green Belt to areas designated for their environmental importance, urban green spaces and the wider countryside.

Value of Ecosystem Services

Improved understanding of the ecosystem services provided by the natural environment is helping to calculate the value of open spaces around towns and cities to maintaining a healthy environment and quality of life for people. This is particularly important in dealing with the consequences of climate change. This report shows how Green Belt land is contributing to a range of benefits to the environment and to society, and at the end of Chapter 1 the relationship between these benefits and ecosystem services is explained.

In Canada, an attempt has been made to put a monetary value on the ecosystems provided by the Ontario Green Belt around Toronto.

The value of England's Green Belt ecosystem services is a subject that would merit further investigation and the Ontario study can, at best, only provide an indication of the level of ecosystem benefits that England's Green Belts currently offer or could be made to offer in future.

Ontario has a population of 12-13 million, compared with England's 51 million. The much greater population of England is likely to be a factor in the much higher 'cultural' value that is attached to Green Belt land in England. The Barker Review of Land Use Planning cited a 2004 study for the Government which places the cultural value of Green Belt land at £889 per hectare (based in turn on a study in 1992[97]), far higher than the £90 (C$138) per hectare quoted in the Ontario study.

[97] Hanley, N. & Knight, J. (1992) Valuing the environment: Recent UK experience and an application to Green belt land, *Journal of environmental planning and management*, Vol. 35(2), pp 145-160

Ontario Green Belt

UN-HABITAT[98] has identified Toronto in Canada as having one of the 10 most extensive areas of sprawl in the world. In 2005 the provincial government of Ontario established by Act of Parliament a Green Belt, covering an area of 760,240 ha around the city. It has similar policy aims and mechanisms to Green Belts in England. Since the establishment of the Ontario Green Belt, an active Friends organisation has carried out an extensive promotional drive to emphasise the benefits of protected countryside through such events as the 'Tour de Greenbelt'[99].

Ontario Green Belt Ecosystem Services

To assess the monetary value of the Ontario Green Belt, the ecosystems were assessed and a financial value attributed to them[100]. Some 20 types of 'service' were considered including: fresh water; air quality; global and local climate regulation; eco-tourism and culture/heritage. The components of the valuations included carbon stored in soils and annual carbon uptake, alongside habitat for pollination, biological control, erosion control, soil formation, nutrient cycling, and 'cultural value'.

The Ontario study valued the overall benefits of such services at $2.6 billion (approximately £1.5 billion) per year. The value per hectare of land was estimated to be the equivalent of £2,000. Of this overall total, the component of 'cultural value' (or the willingness of the public to pay for protection of the Green Belt expressed as a monetary value) was put at C$138 per hectare (or approximately £90 based on exchange rates at the time of writing).

The Green Infrastructure Approach

'Green infrastructure'[101] has recently become embedded in planning for regions and sub-regions targeted for significant economic and physical growth. As areas that are particularly attractive for economic growth often tend to be those with Green Belt designations, the relationship between green infrastructure initiatives and Green Belt policy is significant. Green Belts provide important green infrastructure both around settlements but also within some towns, such as Walsall. However, to date, most existing green infrastructure approaches have been devised within an urban and urban-fringe context, as may be seen with the Greater Manchester example below. Green Belt land, by contrast, is mostly in agricultural production and issues such as access have to be reconciled with agricultural production and sustainable land management[102]. At the same time the Green Belts are countryside in which the towns they surround have a particularly strong stake. As the Greater Manchester example below shows Green Belt policy provides (i) a crucial foundation for developing a range of green infrastructure initiatives as well as (ii) a potential location for new open spaces and linkages between them.

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[98] United Nations Human Settlements Programme (UN Habitat), *Planning Sustainable Cities: Global Report on Human Settlements,* October 2009. Summary available from: www.unhabitat.org.

[99] See www.greenbelt.ca/greenbelt/visit/tour-de-greenbelt-cycles-into-final-weekend-family-fun-and-fresh-local-food-expected, dated 25 September 2009, accessed 6 October 2009.

[100] David Suzuki Foundation, September 2008, Ontario's Wealth, Canada's Future: Appreciating the Value of the Greenbelt's Eco-Services.

[101] See the Executive Summary of this report for a definition of 'green infrastructure'.

[102] Gallent et al 2008, op cit.

Case study – Greater Manchester Green Infrastructure Framework

Natural England and the Greater Manchester Authorities have jointly prepared a framework for the emerging Manchester City region. The framework defines Green Infrastructure as "our outdoor natural environment". More specifically it is a planned and managed network of natural environmental components and green spaces that connect city centres, towns and 'rural fringe' (in this case the Green Belt). The network includes open space, linkages (such as canals and cycle paths) and 'urban green' (such as pocket parks, verges and street trees).

Importantly the Framework starts from a basis that 'asset-oriented policy and planning procedure', including Green Belt policy, 'is an essential tool in Green Infrastructure planning'. Due to its protected status Green Belt land, along with designated ecological sites and flood zones, will form the 'skeleton' of the Green Infrastructure Framework.

The Framework argues that a challenge for planning is to set standards and use spatial planning to address the following through multifunctional use of land:

- Flood management
- Climate change adaption;
- Ecological framework;
- Sustainable movement networks;
- Sense of place;
- Image and design quality;
- Urban regeneration;
- Health and enjoyment.

Public, land manager and professional views

The national survey for this study revealed a mixed public response to questions about whether the Green Belt could be used more for renewable or low carbon energy schemes. To the question: '**I would like to see the countryside around England's towns and cities used to generate green energy'** – 63% agreed, lower than the other value statements on nature conservation, quiet recreation and local food which scored between 78-80%. Only 11% of respondents wanted to see more green energy (hydro, biomass or wind turbines) in the Green Belt which made it the joint second least popular option from twelve (see Figure 36 below). The least popular was 'woodland grown for fuel' at just 5% (Figure 36). The relative unpopularity of specific green energy schemes was mirrored in the local surveys.

Making greater amounts of Green Belt land available for new renewable energy generation is likely to require a sensitive use of the planning process, involving developers, local authorities and communities in and around the Green Belt. The recent achievements of the Transition Towns movement and the 'Go Zero' campaign in Chew Magna, a village in the Avon Green Belt where a series of initiatives were organised to reduce energy usage amongst villagers, show that the potential exists to gain significant public support[103]. It is likely though that this support will be dependent on continued protection of the Green Belt's key characteristic of openness.

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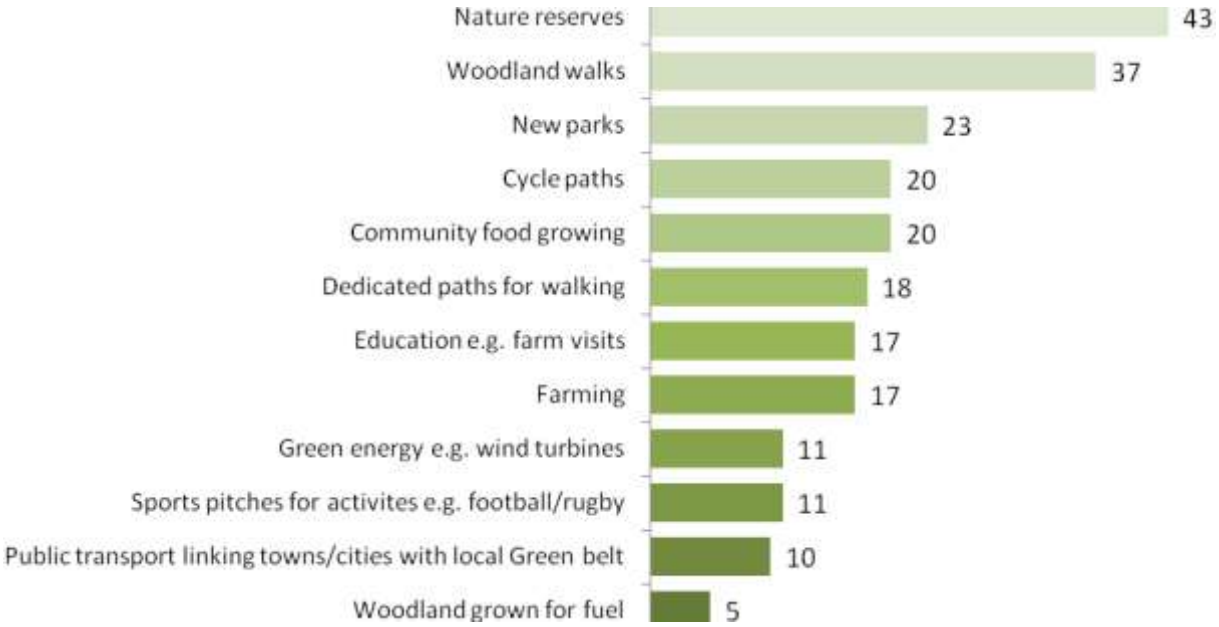
[103] Cookson R, 'Chew Magna: Is this greenest village in Britain?, *Independent* 6 March 2006. Accessed from www.independent.co.uk on 10 October 2009.

Figure 36 – Public views on changes to uses of Green Belt land



Summary

The role played by land designated as Green Belt, and indeed undeveloped countryside more generally, in helping to mitigate, and adapt to, climate change is only just beginning to be understood. The benefits these areas provide when left undeveloped or used for purposes such as agriculture or forestry are often un-recognised or taken for granted.

To maximise the benefits from ecosystem services, we need to use land to deliver multiple objectives with a Green Infrastructure approach at the heart of decisions about changing land use.

Can the Green Belt contribute to meeting the new challenge of climate change?

Undeveloped land, both in the Green Belt and the wider countryside, plays an important role in helping the nation prepare for a low carbon future and to tackle the impacts of climate change. This role should be explicitly acknowledged in planning policy, and policy levers used to drive the delivery of sustainable adaptation.

Chapter 9

Conclusions

Conclusions

This report shows that Green Belt policy continues to be highly effective in terms of its purposes of preventing urban sprawl and maintaining a clear physical distinction between town and country. Alongside this, fresh evidence has been presented on the benefits which Green Belt land is delivering and how these relate to the ecosystem services they provide. For example, it reveals that Green Belt land has a greater proportion of woodland and a more concentrated range of public access opportunities than other parts of England.

The thinking of both Natural England and CPRE has converged around the benefit to the general public of having land free from built development near major urban areas which delivers multiple objectives and a range of ecosystem services. Green infrastructure is important to the successful functioning of urban areas and the relationship to rural areas around them. The Green Belts already make a huge contribution to green infrastructure. With new challenges presented by climate change, along with additional pressure for new housing in the future, the Green Belts and all urban fringe land surrounding towns and cities could take on an even more significant role in providing an environmental resource for England's population. A multifunctional approach to land use is essential to combine the range of activities – such as production of local food, educational visits, access for recreation and provision of sustainable energy – that can be integrated with each other, and across as much land at the same time as possible.

This report does not reach any conclusions about which pattern of settlement development might be most effective at meeting the challenge of climate change. It does recognise, however, that land designated as Green Belt is already making a significant contribution to the ecosystem services that are essential to help mitigate against and adapt to climate change. The Green Belts can help to improve connectivity between the areas designated for their environmental importance, urban green spaces and the wider countryside, to form ecological networks and green recreation networks. Space is needed to provide these benefits and services and to date the Green Belt has been very successful at making sure that has happened. It is important not to lose sight of this contribution to the environment and to England's people.

In summary, we call for more ambition to enhance Green Belt land so that we can be proud to pass it on to the next generation. If everyone planning and managing the land works together then it will be capable of meeting the challenges of the future. Ideas on how to put this into practice are presented in the summary accompanying this evidence report.

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Annex 1

Methodology

1. Green Belt area

Robust estimates of the area of Green Belt land in England by local planning authority were first published in 1997. The Department for Communities and Local Government collects the data annually from 197 planning authorities in England and compiles Green Belt statistics with updates released each year. The estimates have improved for 2008/09 due to improved measuring techniques from digitised data (using geographic information systems as opposed to measurements from paper maps) and the impact of Ordnance Survey's positional accuracy improvement exercise on some local authority data.

Based on this source, Green Belt boundaries on a 1 hectare grid were provided by the University of Sheffield for use in this study. The boundaries were created using data compiled in 2006 in order that it could be compared to other datasets available up to 2006, such as the Rural Land Registry and National Land Use Data.

The data used for this study includes the Green Belt land within the New Forest and Test Valley District Councils. The Green Belt designation was removed from 47,300 hectares of land in these areas when the New Forest was designated as a National Park later in 2006.

The total area of land included as Green Belt for this study is 1,619,835 hectares which is 12.4% of England (13,050,388 hectares at mean high water). The areas are presented in Figure 3. The process of creating the hectare square grid and the timing of data collection have resulted in discrepancy of 19,000 hectares (or approximately 1.1% of the total area) compared to the total area recorded by CLG which is 1,638,288 hectares (12.6% of England).

2. Data analysis and reporting

Analysis was based on 1 hectare square polygon data. Data for each Green Belt area, and the total area of Green Belt in England has been benchmarked against non-Green Belt urban fringe areas (described as Comparator Areas through-out the report) and against all England.

Data in the report has been presented in two ways: it shows (i) the proportion of Green Belt land which has a particular land cover, use or feature; and (ii) it shows what proportion of a particular land cover, use or feature is found in Green Belt compared to other areas and England as a whole. So for Country Parks, as an example, the data shows that Country Parks cover 1% of Green Belt land but that 44% of the total area of Country Park across England is within Green Belt areas.

3. National survey of public attitudes

In July and August 2009, questions regarding Green Belt land in England were included in Natural England's national in-home omnibus survey. The questions covered the following areas:

- awareness and attitudes towards Green Belt land;
- perceived importance of Green Belt land;
- use of Green Belt land;
- how Green Belt land should be used in the future.

1,754 interviews were undertaken during 2 weekly waves of the survey between 24 July 2009 and 11 August.

The national omnibus survey is conducted on behalf of Natural England by TNS UK Ltd. It is undertaken weekly with a representative sample of England's population. The survey aims to provide reliable longitudinal data to monitor levels of engagement with the natural environment over time, including:

- volume of visits to the natural environment;
- visit characteristics (duration of visit, main activity, origin, destination, group composition, distance travelled, mode of travel);
- profiles of visitors and non-visitors to the natural environment;
- reasons for not visiting the natural environment;
- other measures of engagement with the natural environment.

The survey uses an in-home, face to face omnibus survey method. Every week surveying is undertaken across England with interviews in at least 100 locations. A quota sampling approach is used to ensure that results are representative of the English adult population.

The survey method allows for additional questions to be added providing a measure of the English adult population's behaviour and opinions relating to other areas of interest.

The full results of the survey are available on the Natural England and CPRE web sites with this report.

4. Local surveys

Between April and August 2009 CPRE carried out a survey of attitudes to the Green Belt in three areas where the designation is in force. These areas were Avon; London and the areas of the London Green Belt closest to London but outside the GLA area; and Merseyside. Survey questions were altered to make them regionally specific.

Within each region, separate surveys were provided for the public, and for landowners, farmers and those involved in the management of the countryside, respectively. The survey was carried out by Sustain – the alliance for food and farming in Avon and London; and by Myerscough College in Merseyside. Two separate surveys were produced, aimed respectively at the general public and at landowners or professionals (such as planners and surveyors) directly involved in managing Green Belt land.

The questionnaires were available to fill out online, through SurveyMonkey. Paper copies were also available. Any paper copies received were entered directly into the relevant online questionnaire to ensure all data was consistently recorded. Incomplete paper surveys were discarded.

The CPRE survey was publicised in Planning magazine and distributed via activist and professional e-mail networks and at country fairs and shows such as the Commonwork Open Day and Knowsley Flower Show. 1026 responses were received, with 967 being from members of the public and 59 from land professionals.

The total number of full responses received is set out below.

	London	**Bristol**	**Mersey**
Public	435	395	137
Landowner	29	19	11

The national survey incorporated eight of the questions used in the CPRE survey. This aimed to provide a comparison with the findings of the CPRE survey in terms of attitudes to the Green Belt across all English regions and social / demographic cleavages of sex, age, class, disability and ethnicity.

The full results of the survey are available on the Natural England and CPRE web sites with this report.

5. Literature Review and Expert Interviews: Analysis

CPRE carried out a review of academic and professional literature on Green Belt policy and land management during summer 2008. Key sources used are listed in the bibliography and findings were integrated into subsequent survey work and the final report of this project.

The literature review was followed by 26 in-depth interviews during autumn 2008, with the objectives of (i) testing the findings of the literature review and (ii) identifying priorities for the surveys of the general public which followed. A number of national organisations and academics with an interest in Green Belt policy and some local organisations based in Avon and Merseyside, where subsequent public survey work was carried out, were involved. A combination of face to face and telephone interviewing was used.

Interviews were based around a series of set questions. These were intended to guide discussion although participants were encouraged to raise any issues considered relevant to the project. The list of questions is provided on the web page with the report.

List of participants in interviews

Avon

- Bath & North East Somerset Council (planning department)
- Duchy of Cornwall (Eastern region)
- Farming and Wildlife Advisory Group (FWAG)
- Forest of Avon
- Sustain

Merseyside

- Knowsley Metropolitan Borough Council (Integrated Countryside Management team)
- Liverpool City Council (Parks Department)
- Liverpool City Council (planning department)
- Mersey Forest
- Merseyside Environmental Service
- St Helens Metropolitan Borough Council (planning department)

London

- Corporation of London
- Greater London Authority (planning team)

National organisations and academics

- Cardiff University (Professor Kevin Morgan)
- Federation of City Farms and Community Gardens
- Groundwork

- Heriot Watt University (Sarah McIntosh)
- Land Use Consultants
- Land Restoration Trust
- Liverpool University (Professor David Shaw)
- Manchester University (Professor John Handley, Joe Ravetz)
- Soil Association
- University of the West of England (Dr Richard Spalding)

Others

- Edinburgh Green Spaces Trust
- Ontario Friends of the Greenbelt Foundation

Annex 2

List of data tables

Table 1a – Land Cover Map 2000 – aggregated

Green Belt Areas	Area by Land Cover Classification (hectares)									
	Arable and horticulture	Improved grassland	Semi-natural grass	Mountain, heath, bog	Broad-leaved / mixed woodland	Coniferous woodland	Built up areas and gardens	Standing open water	Coastal	Total
Avon	16,005	32,005	4,778	404	8,855	1,079	3,520	180	38	**66,864**
Burton upon Trent & Swadlincote	257	270	85	1	17		83	1		**714**
Cambridge	19,494	1,083	3,375	180	1,232	30	921	25		**26,340**
Gloucester & Cheltenham	2,149	2,573	944	33	480	23	484	8		**6,694**
London (Metropolitan)	186,960	80,982	67,940	5,166	86,834	13,467	37,468	4,547	795	**484,159**
North West	62,709	72,863	50,866	6,500	24,733	2,779	21,958	2,102	3,140	**247,650**
Nottingham & Derby	26,858	12,935	7,257	718	3,898	1,349	6,429	745		**60,189**
Oxford	15,167	7,341	4,345	193	4,304	418	1,563	397		**33,728**
SW Hampshire & SE Dorset	13,234	16,691	7,088	11,721	18,425	7,645	3,745	136	266	**78,951**
South Yorkshire & West Yorkshire	87,706	50,331	41,505	13,287	35,138	2,983	15,769	1,522		**248,241**
Stoke-on-Trent	7,340	26,349	3,722	228	3,371	739	1,898	189		**43,836**
Tyne & Wear	31,167	15,361	8,379	2,036	6,693	4,303	3,568	336	11	**71,854**
West Midlands	89,006	52,238	30,162	2,735	25,531	5,890	17,786	1,606		**224,954**
York	13,941	4,050	3,732	525	1,374	422	1,474	35		**25,553**
Green Belt Total	**571,993**	**375,072**	**234,178**	**43,727**	**220,885**	**41,127**	**116,666**	**11,829**	**4,250**	**1,619,727**
Green Belt as % of England Total	12%	12%	13%	9%	20%	14%	8%	20%	2%	**12%**
Comparator Area Total	**515,720**	**313,035**	**190,638**	**36,772**	**132,660**	**26,117**	**97,678**	**9,124**	**3,921**	**1,325,665**
Comparator Area as % of England Area	11%	10%	10%	8%	12%	9%	7%	15%	2%	**10%**
All England Total	**4,828,627**	**3,018,812**	**1,835,475**	**482,050**	**1,096,737**	**299,209**	**1,381,746**	**59,244**	**194,422**	**13,196,322**

Source: Land Cover Map 2000

Table 1b – Land Cover Map 2000 – aggregated

Green Belt Areas	Area by Land Cover Classification (% percentage)									
	Arable and horticulture	Improved grassland	Semi-natural grass	Mountain, heath, bog	Broad-leaved / mixed woodland	Coniferous woodland	Built up areas and gardens	Standing open water	Coastal	**Total**
Avon	24	48	7	1	13	2	5	0	0	100
Burton upon Trent & Swadlincote	36	38	12	0	2	0	12	0	0	100
Cambridge	74	4	13	1	5	0	3	0	0	100
Gloucester & Cheltenham	32	38	14	0	7	0	7	0	0	100
London (Metropolitan)	39	17	14	1	18	3	8	1	0	100
North West	25	29	21	3	10	1	9	1	1	100
Nottingham & Derby	45	21	12	1	6	2	11	1	0	100
Oxford	45	22	13	1	13	1	5	1	0	100
SW Hampshire & SE Dorset	17	21	9	15	23	10	5	0	0	100
South Yorkshire & West Yorkshire	35	20	17	5	14	1	6	1	0	100
Stoke-on-Trent	17	60	8	1	8	2	4	0	0	100
Tyne & Wear	43	21	12	3	9	6	5	0	0	100
West Midlands	40	23	13	1	11	3	8	1	0	100
York	55	16	15	2	5	2	6	0	0	100
Total % of Green Belt area	35	23	14	3	14	3	7	1	0	100
Total % of comparator area	39	24	14	3	10	2	7	1	0	100
Total % of land area of England	37	23	14	4	8	2	10	0	1	100

Source: Land Cover Map 2000

Table 2 – Extent of Land Use Zones

Green Belt Areas	Percentage of land associated with 'extensive dwellings and associated non-agricultural grazing' zone
Avon	20.5
Burton upon Trent & Swadlincote	30.6
Cambridge	13.0
Gloucester & Cheltenham	24.6
London (Metropolitan)	26.8
North West	25.0
Nottingham & Derby	21.9
Oxford	16.6
SW Hampshire & SE Dorset	33.0
South Yorkshire & West Yorkshire	18.2
Stoke-on-Trent	21.2
Tyne & Wear	16.9
West Midlands	20.0
York	14.1
Green Belt Total	22.9
Comparator Area Total	21.5
All England Total	14.4
Rural England Total	12.2
Urban Area Total	10.8

Source: Rural Land Registry. Analysis by University of Sheffield, 2009.

Table 3a – Development Indicators

Green Belts Areas	Land developed (for all uses) (ha)	Percentage of land developed or redeveloped (for all uses)	Percentage of development on brownfield sites	Undeveloped land converted to developed use as a percentage of total area			Dwelling density (units per ha)
				All uses	Commercial uses	Residential uses	
Avon	764	1.15	38.0	0.71	0.09	0.28	6.53
Burton upon Trent & Swadlincote	15	2.16	54.5	0.98	0.36	0.20	8.83
Cambridge	165	0.63	23.8	0.48	0.07	0.17	9.20
Gloucester & Cheltenham	115	1.73	24.6	1.30	0.04	0.23	17.11
London (Metropolitan)	7,186	1.50	42.1	0.87	0.08	0.31	7.15
North West	4,081	1.66	40.0	1.00	0.16	0.30	10.20
Nottingham & Derby	641	1.07	38.9	0.65	0.10	0.23	9.00
Oxford	319	0.95	36.8	0.60	0.04	0.21	9.46
SW Hampshire & SE Dorset	828	1.06	24.7	0.80	0.03	0.31	4.47
South Yorkshire & West Yorkshire	3,354	1.36	40.5	0.81	0.08	0.24	11.88
Stoke-on-Trent	420	0.96	37.0	0.61	0.12	0.24	8.51
Tyne & Wear	596	0.83	32.5	0.56	0.03	0.18	9.56
West Midlands	3,510	1.57	34.6	1.03	0.09	0.33	8.84
York	374	1.47	28.5	1.05	0.16	0.30	8.40
Green Belt Total	22,370	1.39	38.6	0.86	0.09	0.28	8.64
Comparator Area Total	29,362	2.23	39.0	1.36	0.29	0.49	16.36
All England Total	283,342	2.17	53.4	1.01	0.15	0.53	19.17
Rural England Total	110,159	1.20	39.3	0.73	0.10	0.39	15.12
Urban Area Total	86,626	10.28	85.1	1.53	0.22	0.97	27.54

Source: CLG: Land Use Change Statistics, 1985 – 2006. Analysis by University of Sheffield, 2009.

Table 3a provides a series of long term development indicators which allow the rate and character of urban development in the Green Belt to be compared with that typical of other areas. Column 1 expresses the whole area being developed or redeveloped[104] for built uses relative to the entire extent of the area. Patterns of change for the period 1985 – 2006 are analysed. The most recent years are not examined because of the lags which occur firstly between data collection by Ordnance Survey and transfer to CLG, and secondly because of the complex patterns of recording lags associated with Ordnance Survey map-updating priorities (Bibby and Shepherd 1997).

[104] The term developed is used to indicate a change from an open land use to a built use, while the term 'redeveloped' is used to refer to a change between built uses.

Table 3b – Summary Development Indicators 2000 – 2006

	Area developed or redeveloped (hectare per sq. Km)	Percentage of development on brownfield site	Undeveloped Land converted to Developed Use as a Percentage of Total Area			Dwelling density (units per hectare}
			All uses	Commercial use	Residential use	
Green Belt	0.4	48.3	0.2	0.0	0.1	9.6
Comparator Area	0.8	44.6	0.5	0.1	0.2	23.1
Urban Area*	5.4	68.9	1.7	0.8	0.7	34.4

Source: CLG: Land Use Change Statistics, 1985 – 2006. Analysis by University of Sheffield, 2009.

Table 3b confirms that the differentials that distinguish development patterns in the Green Belts and elsewhere over the long period have remained similar since 2000. The residential density differentials apparent in the 1980s and 1990s persist, albeit that densities have been levered up substantially, especially in the urban areas. This serves to underscore the very particular character of Green Belt residential development.

Table 4 – Relative house prices and change in relative house prices, 2000 – 2004

Green Belt Areas	House Price Index (a)	Change in House Price Index 00-04 (b)
Avon	126.0	13.3
Burton upon Trent & Swadlincote	106.9	-16.2
Cambridge	124.3	10.8
Gloucester & Cheltenham	127.1	4.6
London (Metropolitan)	142.0	12.5
North West	106.1	4.4
Nottingham & Derby	106.3	5.5
Oxford	137.7	17.3
SW Hampshire & SE Dorset	142.5	21.9
South Yorkshire & West Yorkshire	100.6	4.9
Stoke-on-Trent	100.9	4.2
Tyne & Wear	101.7	7.3
West Midlands	118.6	10.4
York	107.5	13.8
Green Belt Total	120.2	8.5
Comparator Area	106.5	2.1
All England	100.0	0.0
Rural England	100.6	2.0
Urban	99.9	-0.7

Source: Her Majesty's Land Registry. Analysis by University of Sheffield.

Table 5 – Extent of Green Belt and Undeveloped Land Conversion 1985 – 2006

West Midlands illustration

Urban Area	% of margin subject to Green Belt controls	Rate of change as percentage of area		
		Overall	Green Belt	Comparator Area
Nuneaton	50.4	1.8	0.6	1.3
Rugby	48.3	1.8	0.4	1.8
Droitwich	46.5	2.1	1.0	1.4
Bridgnorth	44.3	0.5	0.3	0.3
Birmingham	92.7	1.8	1.3	3.6
Tamworth	51.5	2.7	2.4	1.4

Source: CLG: Land Use Change Statistics, 1985 – 2006. Analysis by University of Sheffield, 2009.

The overall rate of undeveloped land conversion is expressed relative to the total urban area of the town together with its 5 km margin. Rates for the Green Belt and the Comparator Area are calculated relative to the total area of these areas. Note the size of the urban areas and the amount of land subject to Green Belt controls varies.

Table 6 – Recreational 0pportunities (non linear)

Green Belt Areas	Country Parks (ha)	Percentage of Green Belt as Country Park	National Nature Reserves (ha)	Local Nature Reserves (ha)	Percentage of Green Belt as LNR	Registered Parks & Gardens (ha)	Percentage of Green Belt as Reg' Parks/ Gardens	Open Access Land [1] (ha)	Percentage of Green Belt as Open Access Land[1]	Dedicated Access Land [2](excluding overlaps with Open Access Land) (ha)	Percentage of Green Belt as Dedicated Access Land	Common Land (ha)	Percentage of Green Belt as Common Land	Community Forest (ha)	Percentage of Green Belt as Community Forest	National Trust Land (ha)	Percentage of Green Belt as National Trust land	Total area of Village, Doorstep and Millennium Greens (ha)	Percentage of Village, Doorstep and Millennium Greens	Woodland Trust Land Accessible to the Public (ha)	Percentage of Green Belt as Woodland Trust land
Avon	308	0.5	190	298	0.4	1,948	2.9	562	0.8	274	0.4	301	0.5	35,646	53.3	818	1.2	8.14	0.01	72	0.11
Burton upon Trent & Swadlincote	–	0	–	–	0	–	0		0.0		0.0		0.0	–	–	–	–	–	–		–
Cambridge	184	0.7	–	25	0.1	226	0.9	140	0.5		0.0	140	0.5	–	–	244	0.9	2.27	0.01	26	0.1
Gloucester & Cheltenham	56	0.8	–	–	0	–	0	37	0.6		0.0	8	0.1	–	–	25	0.4	0.51	0.01	17	0.25
London (Metropolitan)	6,475	1.3	1,895	4,473	0.9	17,724	3.7	14,944	3.1	1,532	0.3	13,606	2.8	23,735	4.9	9,398	1.9	378.48	0.08	1,882	0.39
North West	4,580	1.8	1,707	2,061	0.8	4,709	1.9	8,629	3.5	1,231	0.5	4,017	1.6	75,317	30.4	3,146	1.3	45.47	0.02	374	0.15
Nottingham & Derby	664	1.1	–	388	0.6	921	1.5	4	0.0	594	1.0	4	0.0	21,371	35.5	–	–	8.94	0.01	32	0.06
Oxford	113	0.3	1	–	0	639	1.9	241	0.7	136	0.4	241	0.7	–	–	1	0	15.77	0.05	22	0.07
SW Hampshire & SE Dorset	458	0.6	1,344	519	0.7	1,093	1.4	19,871	25.2	1,675	2.1	1,046	1.3	–	–	3,393	4.3	16.35	0.02	1	0
South Yorkshire & West Yorkshire	1,266	0.5	–	2,187	0.9	4,753	1.9	15,805	6.4	123	0.0	7,600	3.1	27,984	11.3	1,454	0.6	23.60	0.01	258	0.1
Stoke-on-Trent	546	1.2	41	190	0.4	742	1.7	327	0.7		0.0	155	0.4	–	–	140	0.3	5.56	0.01	3	0.01
Tyne & Wear	447	0.6	–	252	0.4	1,361	1.9	112	0.2	816	1.1	81	0.1	–	–	279	0.4	19.18	0.03	196	0.27
West Midlands	3,358	1.5	72	1,278	0.6	4,685	2.1	2,509	1.1	1,843	0.8	2,027	0.9	17,056	7.6	2,285	1	30.03	0.01	321	0.14
York	11	0	21	20	0.1	11	0	193	0.8	119	0.5	178	0.7	–	–	–	–	3.87	0.02	9	0.04
Green Belt Total	18,466	1.1	5,271	11,691	0.7	38,812	2.4	63,374	3.9	8,343	0.5	29,404	1.8	201,109	12.4	21,183	1.3	558.17	0.03	3,213	0.2
Green Belt as % of England Total	44		5	33		23		7		6		8		41		11		13		29	
Comparator Area Total	9,114	0.7	3,229	7,089	0.5	20,193	1.5	49,325	3.7	6,174	0.5	14,395	1.1	91,310	6.9	16,961	1.3	450.59	0.03	1,999	0.15
Comparator Area as % of England Total	22		3	20		12		6		4		4		18		9		11		0	
All England Total	42,135	0.3	95,859	35,786	0.3	170,734	1.3	865,198	6.6	143,037	1.1	372,664	2.9	494,038	3.8	193,084	1.5	4,217.42	0.03	11,028	0.09

Source: Natural England

[1] Designated under Countryside and Rights of Way Act, 2000

[2] Land dedicated for access using Section 1b of Countryside and Rights of Way Act, 2000

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Table 7 – Recreational opportunities: Public Rights of Way (PRoW) and National Cycle Network

Green Belt Areas	PRoW Total Length in km	PRoW Density (metres per ha)	National Cycle Network Length in km		
			On Road	Traffic Free	Total
Avon	1,694	25	454	109	563
Burton upon Trent & Swadlincote	16	23	–	–	–
Cambridge	248	9	19	34	53
Gloucester & Cheltenham	191	29	1	–	1
London (Metropolitan)	9,899	20	285	417	702
North West	5,239	21	847	492	1,339
Nottingham & Derby	1,050	17	11	41	52
Oxford	567	17	47	51	98
SW Hampshire & SE Dorset	626	8	39	72	111
South Yorkshire & West Yorkshire	5,167	21	246	430	676
Stoke-on-Trent	833	19	47	28	76
Tyne & Wear	1,063	15	133	172	306
West Midlands	3,630	16	158	112	270
York	209	8	21	64	84
Green Belt Total	30,433		2,309	2,023	4,331
Green Belt as % of England Total	17	19	23	33	27%
Comparator Area Totals	22,552		2,796	4,049	6,845
Comparator Areas as % of England Total	12	17	28	66	42
All England Totals	181,891	14	10,137	6,164	16,301

Source: Natural England

Table 8 – Sport and recreation – sports pitches and golf courses

Green Belts Areas	Total sports pitches Cricket, Rugby, Football		Golf courses	
	%	intensity	%	intensity
Avon	28.0	0.5	75.6	0.1
Burton upon Trent & Swadlincote	3.8	0.08	14.2	0.02
Cambridge	40.7	1.1	56.2	0.05
Gloucester & Cheltenham	9.3	0.18	32.1	0.03
London (Metropolitan)	18.3	0.25	54.6	0.07
North West	14.4	0.18	53.2	0.05
Nottingham & Derby	14.7	0.23	53.7	0.05
Oxford	22.3	0.56	51.4	0.06
SW Hampshire & SE Dorset	20.0	0.24	47.6	0.07
South Yorkshire & West Yorkshire	20.0	0.31	71.1	0.07
Stoke-on-Trent	20.3	0.3	57.7	0.05
Tyne & Wear	10.4	0.14	54.9	0.03
West Midlands	15.4	0.2	54.2	0.05
York	27.9	0.55	84.6	0.1
Green Belt Total	17.6	0.25	56.4	0.06
Comparator Area Total	12.8	0.18	21.2	0.02
All England Total	100.0	1.67	100.0	0.13
Rural England Total	89.9	2.24	89.0	0.2
Urban Area Total	69.5	0.98	26.3	0.03

Source: Sports England Active Places, June 2009. Analysis by University of Sheffield, 2009

The number of pitches and golf courses within 10 kms of every household in the urban areas has been measured along with the number of those pitches that are within the Green Belt. This has been reported as the share of pitches that are accessible to residents of a particular urban area that are in fact in the Green belt (Measure 1 – percentage) and as the number of pitches within the Green Belt for every 1,000 residents within the urban area (Measure 2 – intensity).

Table 9 – Sport and recreation – businesses and attractions

[by category per 1,000 households]

Green Belts Areas	Number of facilities per 1,000 households				
	Equestrian	Country houses	Caravan sites	Farm shops	Garden centres
Avon	4.0	0.9	0.7	0.3	0.5
Burton upon Trent & Swadlincote	0	0	0	0	0
Cambridge	3.5	0.4	1.6	0.8	0.4
Gloucester & Cheltenham	3.3	0	0.6	0	4.0
London (Metropolitan)	6.4	0.8	0.7	0.5	1.4
North West	3.9	0.4	1.2	0.4	1.3
Nottingham & Derby	3.1	0.3	1.1	0.2	1.6
Oxford	1.8	0.3	1.1	0.7	0.8
SW Hampshire & SE Dorset	3.4	0.2	0.6	0.3	0.9
South Yorkshire & West Yorkshire	3.3	1.3	5.7	0.9	1.1
Stoke-on-Trent	4.7	0.2	0.9	0.6	1.2
Tyne & Wear	4.3	0.7	1.6	0.4	0.9
West Midlands	3.9	1.0	1.1	0.6	1.7
York	5.5	0.6	4.6	0	1.9
Green Belt Total	4.6	0.6	1.1	0.4	1.3
Comparator Area Total	1.9	0.3	1.0	0.3	0.6
All England Total	0.3	0.1	0.3	0	0.1
Rural England Total	0.7	0.2	1.1	0.1	0.2
Urban Area Total	0.1	0	0	0	0

Source: Valuation Office Rating List, 2006. Analysis by University of Sheffield, 2009.

Table 10 – Agri-Environment Agreement Holders with Educational Access Options

Green Belt Area	Number of Holdings		
	Countryside Stewardship Scheme	Higher Level Stewardship	Total
Avon	7	4	11
Burton upon Trent & Swadlincote	0	0	0
Cambridge	2	1	3
Gloucester & Cheltenham	0	0	0
London (Metropolitan)	27	12	39
North West	14	6	20
Nottingham & Derby	2	2	4
Oxford	3	2	5
SW Hampshire & SE Dorset	0	6	6
South Yorkshire & West Yorkshire	16	7	23
Stoke-on-Trent	5	0	5
Tyne & Wear	2	0	2
West Midlands	8	9	17
York	0	0	0
Green Belt Total	86	49	135
Green Belt as % of England Total	15	12	14
Comparator Area Total	56	50	106
Comparator Area as % of England Total	9	12	11
All England Total	592	407	999

Source: Natural England

Table 11 – Landscape Designations

Green Belt Areas	AONB% of Green Belt	AONB (ha)	National Parks (ha)	Heritage Coast (ha)
Avon	21.8	14,549	–	–
Burton upon Trent & Swadlincote		–	–	–
Cambridge		–	–	–
Gloucester & Cheltenham	14.5	970	–	–
London (Metropolitan)	24.7	119,561	–	–
North West	0.0	3	58	–
Nottingham & Derby		–	–	–
Oxford	0.0	1	–	–
SW Hampshire & SE Dorset	4.2	3,342	45,006	502
South Yorkshire & West Yorkshire	1.1	2,838	26	–
Stoke-on-Trent		–	–	–
Tyne & Wear	0.0	6	–	35
West Midlands	2.6	5,917	–	–
York		–	–	–
Green Belt Total	9.1	147,187	45,090	537
Green Belt as % of England Total		7	4	0
Comparator Area Total	13.1	174,195	41,867	5,359
Comparator Area as % of England Total		8	4	2
All England Total	15.8	2,064,684	1,050,843	315,898

Source: Natural England

Table 12 – Dominant character areas of the 14 Green Belts

Green Belt Area	Dominant Character Assessment	Character Assessment	National Character Areas	% of GB	% of NCA
Avon	Neglected (59%) Enhancing (33%)	Diverging	Seven and Avon Vales	9	3
		Enhancing	Cotswolds	33	8
		Neglected	Bristol, Avon Valleys and Ridges	57	45
		Neglected	Avon Vale	2	2
Burton-on-Trent/ Swadlincote	Enhancing (67%) Maintained (33%)	Enhancing	Melbourne Parklands	37	2
		Enhancing	Leicestershire and S Derby	30	1
		Maintained	Mease / Sence Lowlands	33	1
Cambridge	Maintained (95%)	Enhancing	The Fens	5	0
		Maintained	East Anglian Chalk	58	18
		Maintained	Beds and Camb Claylands	37	4
Gloucester & Cheltenham	Diverging (93%)	Diverging	Severn and Avon Vales	93	3
		Enhancing	Cotswolds	7	0
London (Metropolitan)	Maintained (55%) Diverging (42%)	Maintained	Greater Thames Estuary	3	19
		Maintained	South Suffolk and North Essex Clayland	7	10
		Maintained	East Anglian Chalk	1	5
		Maintained	Bedfordshire and Cambridgeshire Claylands	1	2
		Maintained	Bedfordshire Greensand Ridge	2	37
		Maintained	Chilterns	18	51
		Diverging	North Thames Plain	21	40
		Neglected	North Kent Plain	2	13
		Maintained	Thames Basin Lowlands	2	35
		Diverging	Thames Valley	8	45
		Maintained	North Downs	10	34
		Diverging	Wealden Greensand	10	32
		Maintained	Low Weald	9	23
		Maintained	High Weald	3	8
		Diverging	Thames Basin Heaths	4	16
North West	Diverging (70%) Neglected (21%)	Diverging	Morecambe Coast and Lune Estuary	1	13
		Diverging	Lancashire and Amounderness Plain	18	44
		Diverging	Lancashire Valleys	8	34
		Diverging	Southern Pennines	9	18
		Maintained	Dark Peak	2	7
		Enhancing	South West Peak	2	11
		Diverging	Manchester Pennine Fringe	7	42
		Diverging	Manchester Conurbation	2	15
		Diverging	Lancashire Coal Measures	9	56
		Maintained	Sefton Coast	2	56
		Diverging	Merseyside Conurbation	2	18
		Diverging	Wirral	5	68
		Diverging	Mersey Valley	10	56
		Neglected	Shropshire, Cheshire and Staffordshire Plain	21	14
		Maintained	Cheshire Sandstone Ridge	3	30

Table 12 – continued

Nottingham & Derby	Diverging (47%) Neglected (36%)	Maintained	Southern Magnesian Limestone	10	4
		Neglected	Notts, Derbys and Yorks Coalfield	22	8
		Diverging	Trent and Belvoir Vales	29	10
		Neglected	Sherwood	14	15
		Diverging	Derbyshire Peak Fringe and Lower Derwent	9	14
		Diverging	Trent Valley Washlands	8	13
		Maintained	Leicestershire and Nottinghamshire Wolds	9	8
Oxford	Maintained (99%)	Maintained	Upper Thames Clay Vales	63	11
		Maintained	Midvale Ridge	37	28
South Yorkshire & West Yorkshire	Maintained (44%) Neglected (32%) Diverging (23%)	Maintained	Pennine Dales Fringe	5	14
		Maintained	Southern Magnesian Limestone	24	44
		Diverging	Southern Pennines	17	36
		Maintained	Yorkshire Southern Pennine Fringe	14	58
		Neglected	Nottinghamshire, Derbyshire & Yorkshire Coalfield	32	46
		Diverging	Humberhead Levels	5	7
		Diverging	Derbyshire Peak Fringe and Lower Derwent	2	11
		Maintained	Dark Peak	1	3
SW Hampshire & SE Dorset	Maintained (65%) Neglected (35%)	Maintained	New Forest	65	69
		Neglected	Dorset Downs and Cranborne Chase	7	5
		Neglected	Dorset Heaths	28	36
Stoke-on-Trent	Maintained (64%) Neglected (36%)	Neglected	Shropshire, Cheshire and Staffordshire Plain	36	4
		Maintained	Potteries and Churnet Valley	56	46
		Maintained	Needwood and South Derbyshire Claylands	8	4
Tyne & Wear	Neglected (51%) Maintained (43%)	Maintained	North Pennines	11	4
		Maintained	Tyne Gap and Hadrian's Wall	23	38
		Maintained	Mid Northumberland	9	10
		Neglected	South East Northumberland Coastal Plain	18	30
		Neglected	Tyne and Wear Lowlands	20	32
		Enhancing	Durham Magnesian Limestone Plateau	6	9
		Neglected	Durham Coalfield Pennine Fringe	13	14
West Midlands	Diverging (72%) Maintained (22%)	Neglected	Shropshire, Cheshire and Staffordshire Plain	5	3
		Maintained	Mid Severn Sandstone Plateau	22	56
		Diverging	Cannock Chase and Cank Wood	15	46
		Diverging	Trent Valley Washlands	2	10
		Maintained	Mease / Sence Lowlands	1	4
		Diverging	Leicestershire Vales	4	12
		Diverging	Dunsmore and Feldon	7	22
		Diverging	Arden	39	60
		Diverging	Severn and Avon Vales	6	6
York	Neglected	Neglected	Vale of York	100	25

Table 13a – Vacant brownfield land in the Green Belt

	Vacant brownfield land (hectares)				
Region	**2007**	**2006**	**2005**	**2004**	**2003**
East Midlands	23.7	23.7	25.0	25.0	25.0
East of England	13.3	12.7	13.5	14.1	9.0
London	6.1	6.1	8.7	9.1	3.5
North East	4.7	4.6	6.2	0.9	2.7
North West	184.2	208.2	208.4	240.7	190.2
South East	181.5	158.7	114.0	97.7	96.8
South West	1.4	1.4	0. 9	0. 9	no sites
West Midlands	109.9	96.2	12.9	33.2	31.4
Yorkshire and Humberside	351.4	516.6	491.7	408.4	402.2
Total	876.1	1,028.1	881.2	829.9	760.8

Source: Homes and Communities Agency

NOTE:

Figures representing the stock of vacant brownfield land for housing has been derived from the National Land Use Database (NLUD) mixed vintage figures. This means that whilst the majority of the data returns were provided during the denoted year of data collection, but where no return was made, the most recent data was entered where previously available.

Figures have been derived from spatial analysis using NLUD sites as provided by Local Planning Authorities across England and the current Greenbelt sourced from Landmark. The centre points of NLUD sites have been used and therefore all figures are estimates.

The figures provided should be treated with caution as being on the dataset does **not** necessarily mean that a site is available for development.

No indication of how potential constraints and their effects on sites are factored in to the figures. Some of which could totally rule out any hard development (including housing or employment use).

Table 13b – Derelict brownfield land in the Green Belt

	Derelict brownfield land (hectares)				
Region	**2007**	**2006**	**2005**	**2004**	**2003**
East Midlands	113.9	118.2	116.4	122.5	122.4
East of England	12.2	14.6	14.6	17	17
London	39.6	39.6	38.6	40.4	41.1
North East	48.1	17.3	17.9	19.6	19.6
North West	1,033.7	1,122.0	1,187.0	1,464.7	1,114.8
South East	96.2	98.4	114.5	141.6	126.4
South West	22.2	25.8	25.8	25.5	25.8
West Midlands	248.8	265.4	334.3	350.0	348.5
Yorkshire and Humberside	413.7	449.2	462.3	453.9	530.1
Total	2,028.4	2,150.6	2,311.4	2,635.3	2,345.7

Source: Homes and Communities Agency

Table 14 – Sites protected for nature conservation

Green Belt Areas	National Nature Reserves (ha)	Local Nature Reserves (ha)	RSBP Reserves (ha)	Ancient Woodland Inventory (ha)	Sites of Special Scientific Interest Condition							SSSI Total (ha)	% Favourable or recovering
					Favourable	Unfavourable Recovering	Unfavourable No Change	Unfavourable Declining	Part Destroyed	Destroyed	Not Assessed		
Avon	190	298		2,134	942	281	67	222				1,512	81
Burton upon Trent & Swadlincote	–	–		–								–	
Cambridge	–	25		45	199	109	70	14				392	79
Gloucester & Cheltenham	–	–		12	3	43		2				48	96
London (Metropolitan)	1,895	4,473	858	31,836	10,928	11,101	1,446	1,513	7			24,995	88
North West	1,707	2,061	285	2,468	3,000	1,617	2,266	259				7,142	65
Nottingham & Derby	–	388		849	104	267	53	5				429	86
Oxford	1	–	272	1,520	761	903	54	36				1,754	95
SW Hampshire & SE Dorset	1,344	519	354	9,330	11,075	20,171	2,192	1,226	1	11	1	34,677	90
South Yorkshire & West Yorkshire	–	2,187	358	9,081	799	9,199	2,980	243		11		13,232	76
Stoke-on-Trent	41	190	12	1,250	136	171	32	71				410	75
Tyne & Wear	–	252		2,775	302	81	38	40				461	83
West Midlands	72	1,278	8	5,632	1,402	1,764	324	65		44		3,599	88
York	21	20		264	280	456	44					780	94
Green Belt Total	5,271	11,691	2,147	67,196	29,931	46,163	9,566	3,696	8	66	1	89,431	85
Green Belt as % of England Total	5%	33%	5%	19%	6%	10%	11%	8%	2%	28%	0%	8%	
Comparator Area	3,229	7,089		43,810	20,554	34,038	5,730	2,669	5	34		63,030	87
Comparator Area as % of England Total	3%	20%	2,059	12%	4%	7%	7%	6%	2%	15%	0%	6%	
All England Total	95,859	35,786	5%	353,590	469,855	477,740	83,895	44,080	332	232	844	1,076,978	88

Source: Natural England

Table 15 – Biodiversity Action Plan Priority Habitats

Green Belt Area	Biodiversity Action Plan Priority Habitats (ha)																				
	Coastal sand dunes	Saline lagoons	Upland hay meadows	Coastal vegetated shingle	Lowland raised bog	Reedbed	Maritime cliff and slope	Upland calcareous grassland	Fens	Undetermined grassland	Purple Moor-grass and rush pastures	Lowland heathland	Lowland dry acid grassland	Blanket bog	Lowland calcareous grassland	Lowland meadows	Deciduous woodland	Coastal and floodplain grazing marsh	Upland heathland	Mudflats	BAP area excluding overlaps	**Percentage of Green Belt area**
Avon	-	-	-	-	-	273	15	-	165	-	90	7	58	-	911	493	4,060	2,841	-	2	8,348	**12**
Burton upon Trent & Swadlincote	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	9	**1**
Cambridge	-	-	-	-	-	55	-	-	35	17	60	-	-	-	141	68	320	607	-	-	1,151	**4**
Gloucester & Cheltenham	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	17	91	133	-	-	255	**4**
London (Metropolitan)	-	3	-	-	-	2,213	-	-	4,113	8,077	375	9,170	1,261	-	1,812	1,279	43,410	4,269	-	95	61,540	**13**
North West	1,620	-	26	-	994	645	23	9	1,116	562	699	2,234	1,914	4,140	129	1,340	8,743	5,838	467	48	25,304	**10**
Nottingham & Derby	-	-	-	-	-	221	-	-	17	64	6	909	64	-	71	273	2,566	370	-	-	4,368	**7**
Oxford	-	-	-	-	-	464	-	-	746	38	8	67	12	-	17	532	1,354	1,910	-	-	3,890	**12**
SW Hampshire & SE Dorset	1	21	-	-	18	1,967	117	-	22,702	33	95	17,730	3,342	-	-	244	11,604	2,791	-	9	38,122	**48**
South Yorkshire & West Yorkshire	-	-	-	-	-	403	-	35	442	555	769	211	1,033	12,462	748	800	14,563	860	896	-	31,123	**13**
Stoke-on-Trent	-	-	-	-	24	2	-	5	203	143	35	255	9	-	11	47	1,930	218	25	-	2,545	**6**
Tyne & Wear	5	-	12	-	25	54	14	-	56	127	37	415	80	-	64	128	3,217	187	5	12	3,944	**5**
West Midlands	-	-	-	-	-	157	-	-	481	665	82	1,995	185	-	-	523	9,391	1,154	-	-	13,399	**6**
York	-	-	-	-	-	566	-	-	691	-	2	543	583	-	-	73	501	287	-	-	1,372	**5**
Green Belt Total	1,626	24	38	-	1,061	7,020	169	49	30,767	10,281	2,258	33,536	8,541	16,602	3,921	5,817	101,759	21,465	1,393	166	195,370	**12**
Green Belt as % of England Total	16%	2%	3%	0%	11%	11%	1%	0%	26%	24%	10%	36%	15%	7%	8%	16%	20%	9%	1%	0%	13%	
Comparator Area Total	850	148	15	75	154	6,896	1,093	121	9,062	9,049	2,299	12,582	6,628	17,200	2,161	4,440	65,633	36,595	8,805	498	158,097	**12**
Comparator Area as % of England Total	8%	10%	1%	3%	2%	10%	5%	1%	8%	22%	10%	13%	11%	7%	4%	12%	13%	16%	4%	1%	10%	

Source: Natural England

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Table 16a – Sites of Special Scientific Interest Condition

Green Belt Areas	SSSI Condition								
	Favourable	Unfavourable Recovering	Unfavourable No Change	Unfavourable Declining	Part Destroyed	Destroyed	Not Assessed	Total	% Favourable or recovering
Avon	942	281	67	222				**1,512**	81
Burton upon Trent & Swadlincote								**–**	
Cambridge	199	109	70	14				**392**	79
Gloucester & Cheltenham	3	43		2				**48**	96
London (Metropolitan)	10,928	11,101	1,446	1,513	7			**24,995**	88
North West	3,000	1,617	2,266	259				**7,142**	65
Nottingham & Derby	104	267	53	5				**429**	86
Oxford	761	903	54	36				**1,754**	95
SW Hampshire & SE Dorset	11,075	20,171	2,192	1,226	1	11	1	**34,677**	90
South Yorkshire & West Yorkshire	799	9,199	2,980	243		11		**13,232**	76
Stoke-on-Trent	136	171	32	71				**410**	75
Tyne & Wear	302	81	38	40				**461**	83
West Midlands	1,402	1,764	324	65		44		**3,599**	88
York	280	456	44					**780**	94
Green Belt Total	29,931	46,163	9,566	3,696	8	66	1	**89,431**	85
Green Belt as % of England Total	6%	10%	11%	8%	2%	28%	0%	**8%**	
Comparator Area	**20,554**	**34,038**	**5,730**	**2,669**	**5**	**34**		**63,030**	87
Comparator Area as % of England Total	4%	7%	7%	6%	2%	15%	0%	**6%**	
Totals for England	**469,855**	**477,740**	**83,895**	**44,080**	**332**	**232**	**844**	**1,076,978**	88

Source: Natural England

Table 16b – Sites of Special Scientific Interest Units in Unfavourable Condition: Adverse Conditions

Adverse conditions affecting Unfavourable SSSI units	As % of Unfavourable land in Green Belt	As % of Unfavourable land in Comparator Area	As % of Unfavourable land in England
Over-grazing	28	28	25
Under-grazing	23	13	9
Inappropriate scrub control	21	13	9
Drainage	14	15	13
Moor burning	8	12	15
Other – specify in comments	8	6	7
Forestry and woodland management	7	10	5
Coastal squeeze	7	8	18
Water pollution – discharge	6	10	8
Fire – other	6	2	2
Inappropriate cutting/mowing	6	3	2
Inappropriate weed control	6	5	3
Water pollution – agriculture/run off	6	11	15
Inappropriate ditch management	5	4	3
Inappropriate water levels	5	6	5
Air pollution	4	0	1
Public access/disturbance	4	2	2
Vehicles – illicit	3	0	1
Invasive freshwater species	2	5	4
Siltation	2	3	3
Earth science feature obstructed	1	1	1
Water abstraction	1	5	3
Fertiliser use	1	0	3
Inappropriate coastal management	1	1	1
Inappropriate weirs dams and other structures	1	2	1
Inland flood defence works	1	0	1
Vehicles – other	1	0	0

Note: Many SSSI Units are affected by more than one adverse condition

Source: Natural England

Table 16c – Sites of Special Scientific Interest in Unfavourable Condition: Mechanisms for Improvement

Mechanisms for Improving Unfavourable SSSI Units	As % of Unfavourable Land in Green Belt	As % of Unfavourable Land in Comparator Area	As % of Unfavourable Land in England
Higher Level Stewardship	44	37	40
Direct management	15	14	8
Facilitate registration on Rural Land Register	13	15	11
Investigation	10	12	8
Conservation Enhancement Scheme / Wildlife Enhancement Scheme	7	9	8
Felling licence required	6	1	1
No mechanism	5	1	1
Compulsory withdraw/modify notice/consent	5	1	1
Flood Risk Management – capital/ improvement schemes	5	7	17
Catchment Sensitive Farming Delivery Initiative	4	7	7
Woodland Grant Scheme	3	9	3
Water level management plan	3	2	6
Regulatory Investigation	3	8	12
Higher Level Stewardship Special Project	3	2	1
Land drainage consent needed	3	0	0
Section 194 approval for fencing of common	3	0	1
Discharge/ Pollution Prevention Control consent – revoke/amend Access Management Scheme	3	1	2
Licences – revoke/ amend	3	0	0
Invasive species control programme	2	3	4
Direct management – other	2	0	0
Existing Local Project	2	1	1
Criminal damage (property)	2	0	0
Implement Access Management Plan Scheme	2	2	4
Undertake specific management works	1	0	1
River restoration project	1	1	2
Flood Risk Management – operational work	1	0	0

Source: Natural England

Table 16d – Sites of Special Scientific Interest in Unfavourable Condition: Organisations responsible for improvement

Organisations Responsible for Improving Unfavourable SSSI Units	As % of Unfavourable Land in Green Belt	As % of Unfavourable Land in Comparator Area	As % of Unfavourable Land in England
Natural England	72	70	68
Forestry Commission	13	11	5
Environment Agency	17	17	30
Surrey Wildlife Trust	3	0	0
National Trust – Wessex	3	2	1
Common Land Branch	3	0	1
Yorkshire Water Services Ltd	2	3	2
Dorset Police	2	0	0
Herpetological Conservation Trust	2	0	0
Ministry of Defence	1	0	1
Sefton London Borough Council	1	0	0
City of London Corporation	1	0	0
Castle Point Borough Council	1	0	0
Wessex Water Services Ltd	1	0	1
Dorset County Council	1	0	0
Highways Agency	1	0	0
Poole Borough Council	1	0	0
Bournemouth And West Hampshire Water Plc	1	1	0
Staffordshire Moorlands District Council	1	0	0
Hampshire County Council	1	2	0
Potteric Carr IDB	1	0	0
Yorkshire Wildlife Trust	1	0	0
Surrey County Council	1	0	0

Source: Natural England

Table 17 – Bird abundance and population trends

Species	Bird abundance			Bird population trends		
	Green Belt compared to Comparator Area	Green Belt compared to Rural Lowland	Comparator Area compared to Rural Lowland	Green Belt compared to Comparator Area	Green Belt compared to Rural Lowland	Comparator Area compared to Rural Lowland
Blackbird, *Turdus merula*	▲	▼	▼			
Blackcap, *Sylvia atricapilla*					▼	▼
Black-headed Gull, *Larus ridibundus*		▲	▲		▼	▼
Blue tit, *Parus caeruleus*	▲	▲			▼	
Bullfinch, *Pyrrhula pyrrhula*						
Buzzard, *Buteo buteo*		▼	▼			
Canada goose, *Branta canadensis*					▼	▼
Carrion crow, *Corvus corone*	▲	▲	▲			
Chaffinch, *Fringilla coelebs*	▲		▼			
Chiffchaff, *Phylloscopus collybita*						
Coal tit, *Parus ater*						
Collared dove, *Streptopelia decaocto*		▼	▼		▼	
Coot, *Fulica atra*		▲	▲	▲	▲	
Cormorant, *Phalacrocorax carbo*					▲	
Corn bunting, *Miliaria calandra*		▲	▲			
Cuckoo, *Cuculus canorus*						
Curlew, *Numenius arquata*		▲	▲			▲
Dunnock, *Prunella modularis*						
Feral pigeon, *Columba livia*	▲		▼		▼	
Garden warbler, *Sylvia borin*						
Goldcrest, *Regulus regulus*						
Goldfinch, *Carduelis carduelis*			▼		▲	▲
Greats. woodpecker, *Dendrocopos major*		▲	▲		▼	
Great tit, *Parus major*	▲	▲	▲			
Green woodpecker, *Picus viridis*		▲	▲			
Greenfinch, *Carduelis chloris*	▲	▼	▼		▲	
Grey heron, *Ardea cinerea*	▼		▲			
Grey partridge, *Perdix perdix*	▲			▲	▼	▼
Herring gull, *Larus argentatus*	▼	▼		▼		▲
House martin, *Delichon urbica*	▲		▼	▲		▼
House sparrow, *Passer domesticus*		▼	▼		▼	▼
Jackdaw, *Corvus monedula*			▼		▲	
Jay, *Garrulus glandarius*		▲	▲			
Kestrel, *Falco tinnunculus*				▼		▲
Lapwing, *Vanellus vanellus*	▲	▲	▲			
Lesser black▼backed gull, *Larus fuscus*					▼	▼

Table 17 – continued

Lesser whitethroat, *Sylvia curruca*						
Linnet, *Carduelis cannabina*						
Long-tailed tit, *Aegithalos caudatus*					▼	
Magpie, *Pica pica*	▲	▲	▲			
Mallard, *Anas platyrhynchos*		▲				
Meadow pipit, *Anthus pratensis*	▼	▲		▲		
Mistle thrush, *Turdus viscivorus*	▲	▲				
Moorhen, *Gallinula chloropus*	▼			▲		▼
Nuthatch, *Sitta europaea*				▲	▲	
Oystercatcher, *Haematopus ostralegus*	▲		▼		▲	▲
Pheasant, *Phasianus colchicus*	▼	▼				
Pied wagtail, *Motacilla alba*	▼	▼		▲		▼
Red-legged partridge, *Alectoris rufa*		▼	▼			
Reed bunting, *Emberiza schoeniclus*					▼	
Robin, *Erithacus rubecula*	▲	▲				
Rook, *Corvus frugilegus*	▼	▼	▼			
Sedge warbler, *Acrocephalus*	▲				▼	
Skylark, *Alauda arvensis*						
Song thrush, *Turdus philomelos*	▲		▼		▲	
Sparrowhawk, *Accipiter nisus*						
Starling, *Sturnus vulgaris*	▲		▼	▲	▼	▼
Stock dove, *Columba oenas*	▼				▲	
Swallow, *Hirundo rustica*	▲	▲	▼		▼	
Swift, *Apus apus*	▲	▲	▼	▲	▲	▼
Tree sparrow, *Passer montanus*		▲		▲	▲	
Treecreeper, *Certhia familiaris*			▼			
Whitethroat, *Sylvia communis*					▲	
Willow warbler, *Phylloscopus trochilus*				▼	▼	
Wood pigeon, *Columba palumbus*		▼	▼		▼	▼
Wren, *Troglodytes troglodytes*	▲	▲			▼	
Yellowhammer, *Emberiza citronella*	▼	▼		▲	▼	▼

Source: British Trust for Ornithology

▲ = statistically significant higher abundance or more positive trend in abundance.

▼ = statistically significant lower abundance or negative trend in abundance.

Gaps are non-significant.

Table 18 – Butterfly population trends

Species	Butterfly population trends		
	Green Belt compared to Comparator Area	Green Belt compared to Rural Lowland	Comparator Area compared to Rural Lowland
Dark Green Fritillary		▲	▲
Silver-washed Fritillary		▼	▼
Green Hairstreak	▲		▼
Small Blue	▼		▲
Dingy Skipper	▼		▲
White Admiral	▲		
Chalk-hill Blue	▲	▲	
Grizzled Skipper			▼
Red Admiral			
Painted Lady			
Small Tortoiseshell		▼	▼
Orange Tip		▼	▼
Ringlet	▲		▼
Brown Argus		▲	▲
Holly Blue		▲	▲
Small Heath	▲	▲	
Brimstone	▲		▼
Small Copper	▼	▼	▲
Meadow Brown			
Gatekeeper			
Marbled White	▲	▲	
Peacock		▼	▼
Large Skipper		▼	▼
Speckled Wood	▲		▼
Wall Brown	▼		
Large White			
Green-veined White			
Small White		▲	
Comma			▼
Common Blue		▼	
Small Skipper			▼

Source: Butterfly Conservation Trust

▲ = statistically significant higher abundance or more positive trend in abundance.

▼ = statistically significant lower abundance or negative trend in abundance.

Gaps are non-significant.

Table 19 – Category 1 & 2 Pollution incidents in 2001 – 2008

Green Belt Areas	Total Incidents	Number of incidents per hectare	Incidents in Green Belt Areas as % of all incidents in England	Agricultural Materials and Wastes	Atmospheric Pollutants and Effects	Contaminated Water	General Biodegradable Materials and Wastes	Inert Materials and Wastes	Inorganic Chemicals / Products	Oils and Fuel	Organic Chemicals / Products	Other Pollutant	Pollutant Not Identified	Sewage Materials	Specific Waste Materials
Avon	46	0.07	1%	9	9	4	1	3	–	8	6	1	1	1	3
Burton upon Trent & Swadlincote	–	0	0%	–	–	–	–	–	–	–	–	–	–	–	–
Cambridge	13	0.05	0%	–	–	–	5	1	–	2	1	–	1	3	–
Gloucester & Cheltenham	5	0.07	0%	–	1	–	–	–	–		1	1	2	–	–
London (Metropolitan)	432	0.09	5%	16	55	25	24	59	10	69	18	14	24	62	56
North West	288	0.12	3%	28	27	20	16	23	10	28	14	16	27	48	31
Nottingham & Derby	39	0.06	0%	1	1	2	3	3	2	3	–	2	2	15	5
Oxford	21	0.06	0%	–	1	–	–	–	–	6	1	6	5	2	–
SW Hampshire & SE Dorset	64	0.08	1%	3	10	–	2	7	–	8	5	2	4	7	16
South Yorkshire & West Yorkshire	510	0.21	6%	27	31	29	82	53	5	28	20	14	25	81	115
Stoke-on-Trent	15	0.03	0%	1	–	1	–	2	1	1	1	–	4	2	2
Tyne & Wear	60	0.08	1%	7	17	2	2	2	1	2	1	1	2	18	5
West Midlands	142	0.06	2%	5	11	7	13	10	6	20	9	8	13	20	20
York	22	0.09	0%	2	1	–	3	1	–	2	–	–	2	4	7
Green Belt Total	1,657	0.1	19%	99	164	90	151	164	35	177	77	65	112	263	260
Green Belt as % of England Total	19%			17%	15%	18%	23%	22%	16%	16%	19%	18%	19%	20%	22%
Comparator Area Total	1,257	0.09	14%	62	105	78	120	132	21	153	45	54	92	226	169
Comparator Area as % of England Total	14%			11%	10%	16%	19%	18%	10%	14%	11%	15%	15%	17%	14%
All England Total	8,723	0.07	100%	581	1,067	498	648	753	213	1,121	412	365	595	1,293	1,177

Source: Environment Agency

Table 20a – Extent of farmed land

Green Belt Areas	Including Minor Holdings				Excluding Minor Holdings				Rural Land Registry
	Total Farmed Area (ha)	Percentage of each Green belt	Number of Holdings	Percentage of total farmed area	Total Farmed Area (ha)	Percentage of each Green belt	Number of Holdings	Percentage of total farmed area	Percentage of total farmed area
Avon	48,007	72	1,693	0.5	47,060	70	967	0.5	72
Burton upon Trent & Swadlincote	687	96	16	0.0	687	96	12	0.0	68
Cambridge	21,672	82	268	0.2	21,601	82	205	0.2	85
Gloucester & Cheltenham	5,997	90	172	0.1	5,918	88	99	0.1	72
London (Metropolitan)	274,564	57	6,377	3.0	271,633	56	4,114	3.0	58
North West	171,914	69	6,189	1.9	169,022	68	3,964	1.8	66
Nottingham & Derby	43,227	72	1,046	0.5	42,808	71	691	0.5	72
Oxford	24,253	72	351	0.3	24,073	71	237	0.3	76
SW Hampshire & SE Dorset	31,971	40	1,186	0.3	31,316	40	674	0.3	40
South Yorkshire & West Yorkshire	176,656	71	5,328	1.9	173,656	70	3,180	1.9	71
Stoke-on-Trent	33,473	76	1,542	0.4	32,666	75	876	0.4	74
Tyne & Wear	49,698	69	819	0.5	49,416	69	550	0.5	73
West Midlands	160,873	72	4,004	1.7	158,946	71	2,533	1.7	72
York	20,651	81	443	0.2	20,424	80	302	0.2	82
Green Belt Total	1,063,645	66	29,434	11.4	1,049,227	65	18,404	11.4	65
Green Belt as % of England Total	11%		14%		11%		15%		
Comparator Area Total	930,435	70	21,208	10	985,649	74	13,387	10.7	70
Comparator Area as % of England Total	10%		10%		11%		11%		
All England Total	9,291,357	71	208,166	100	9,186,542	70	124,552	100	71

Source: June Agricultural Survey 2007 and Rural Land Registry in final column.

Table 20b – Number and size of farm holdings, 1990 and 2007

Green Belt Areas	Holding Size (number of holdings excluding minor holdings)											
	<5 ha		5 <20 ha		20 <50 ha		50 <100 ha		>=100 ha		Total	
	1990	2007	1990	2007	1990	2007	1990	2007	1990	2007	1990	2007
Avon	263	110	327	325	328	229	192	170	119	133	**1,229**	**967**
Burton upon Trent & Swadlincote	0	0	#	5	#	#	#	#	#	#	**9**	**12**
Cambridge	35	10	24	45	65	43	41	35	72	72	**237**	**205**
Gloucester & Cheltenham	36	14	#	29	#	#	#	#	#	#	**133**	**99**
London (Metropolitan)	1590	503	1258	1377	1005	919	596	558	733	757	**5,182**	**4,114**
North West	1268	481	1572	1366	1381	1052	734	689	245	376	**5,200**	**3,964**
Nottingham & Derby	113	69	176	212	196	174	119	115	120	121	**724**	**691**
Oxford	43	22	54	55	37	53	40	28	88	79	**262**	**237**
SW Hampshire & SE Dorset	229	155	242	257	108	120	72	70	63	72	**714**	**674**
South Yorkshire & West Yorkshire	835	327	1247	1146	937	746	541	513	350	448	**3,910**	**3,180**
Stoke-on-Trent	195	91	398	337	319	239	152	148	35	61	**1,099**	**876**
Tyne & Wear	80	50	114	135	139	96	152	102	156	167	**641**	**550**
West Midlands	619	267	805	764	745	617	531	393	444	492	**3,144**	**2,533**
York	61	24	71	72	88	80	83	70	51	56	**354**	**302**
Green Belt Total	5,367	2,123	6,324	6,125	5,387	4,396	3,272	2,908	2,488	2,852	22,838	18,404
Green Belt as % of England Total	18%	16%	17%	17%	15%	16%	13%	14%	11%	11%	15%	15%
Comparator Area Total	3,153	1,338	4,035	4,020	3,720	3,116	2,621	2,288	2,345	2,625	15,874	13,387
Comparator Area as % of England Total	11%	10%	11%	11%	11%	11%	10%	11%	10%	10%	11%	11%
All England Total	29,728	13,187	37,034	36,280	35,320	27,179	25,830	21,309	22,740	26,597	150,652	124,552

Source: June Agricultural Survey 2007

Cells containing information about less than five holdings are suppressed to avoid disclosure of personal information

Table 21 – Farm tenure

Green Belt Areas	Tenure (number of holdings)								
	No Farmed Land or Tenure Unknown	Percentage with no Farmed Land or Tenure Unknown	Owned >= 75%	Percentage Owned	Rented >= 75%	Percentage Rented	Mixed	Percentage Mixed	Total
Avon	248	15	1,133	67	146	9	166	10	**1,693**
Burton upon Trent & Swadlincote	2	13	6	38	5	31	3	19	**16**
Cambridge	27	10	135	50	73	27	33	12	**268**
Gloucester & Cheltenham	26	15	116	67	18	10	12	7	**172**
London (Metropolitan)	948	15	4,173	65	858	13	398	6	**6,377**
North West	807	13	3,873	63	979	16	530	9	**6,189**
Nottingham & Derby	142	14	650	62	153	15	101	10	**1,046**
Oxford	44	13	221	63	59	17	27	8	**351**
SW Hampshire & SE Dorset	210	18	724	61	186	16	66	6	**1,186**
South Yorkshire & West Yorkshire	746	14	3,303	62	766	14	513	10	**5,328**
Stoke-on-Trent	245	16	1,010	65	158	10	129	8	**1,542**
Tyne & Wear	100	12	484	59	166	20	69	8	**819**
West Midlands	565	14	2,501	62	604	15	334	8	**4,004**
York	35	8	322	73	40	9	46	10	**443**
Green Belt Total	4,145	14	18,651	63	4,211	14	2,427	8	**29,434**
Green Belt as % of England Total	14%		14%		15%		15%		**14%**
Comparator Area Total	2,810	13	13,641	64	2,969	14	1,788	8	**21,208**
Comparator Area as % of England Total	9%		10%		11%		11%		**10%**
All England Total	30,378	15	134,208	64	27,283	13	16,297	8	**208,166**

Source: June Agricultural Survey 2007

Table 22 – Robust Farm Type: number of holdings

Green Belt Areas	Farm Type (number of holdings)																			
	Cereals		General cropping		Horticulture		Specialist pigs & poultry		Dairy		Grazing livestock (Less favoured area)		Grazing livestock (lowland)		Mixed		Other types		Total	
	1990	2007	1990	2007	1990	2007	1990	2007	1990	2007	1990	2007	1990	2007	1990	2007	1990	2007	1990	2007
Avon	92	118	24	11	82	63	41	26	259	108	0	0	334	261	90	69	307	311	**1,229**	**967**
Burton upon Trent & Swadlincote	#	#	#	0	0	0	0	0	#	#	0	#	#	5	#	#	#	#	**9**	**12**
Cambridge	127	124	52	26	17	10	8	5	0	#	0	0	10	13	9	#	14	#	**237**	**205**
Gloucester & Cheltenham	#	#	#	0	8	9	7	#	#	6	0	0	#	27	#	10	#	28	**133**	**99**
London (Metropolitan)	935	928	267	114	687	348	248	121	283	92	0	0	1,045	695	340	194	1,377	1,622	**5,182**	**4,114**
North West	334	349	660	381	521	273	254	153	1,012	425	352	445	811	537	287	162	969	1,239	**5,200**	**3,964**
Nottingham & Derby	155	182	85	45	41	27	32	27	102	41	0	0	112	117	96	62	101	190	**724**	**691**
Oxford	75	71	12	7	15	12	7	#	17	5	0	#	49	42	33	10	54	88	**262**	**237**
SW Hampshire & SE Dorset	21	44	18	16	88	50	27	20	81	26	0	0	240	172	42	34	197	312	**714**	**674**
South Yorkshire & West Yorkshire	512	544	256	135	128	113	212	105	569	234	660	677	550	294	291	191	732	887	**3,910**	**3,180**
Stoke-on-Trent	15	35	11	9	33	32	39	39	423	190	98	164	233	119	44	22	203	266	**1,099**	**876**
Tyne & Wear	157	163	26	10	21	13	17	10	70	27	87	62	88	66	92	59	83	140	**641**	**550**
West Midlands	377	527	409	225	188	123	130	85	347	134	0	0	767	543	342	172	584	724	**3,144**	**2,533**
York	61	98	99	60	15	14	20	12	29	12	0	0	48	36	43	29	39	41	**354**	**302**
Green Belt Total	2,873	3,200	1,924	1,039	1,844	1,087	1,042	609	3,210	1,302	1,197	1,348	4,336	2,927	1,726	1,017	4,686	5,875	22,838	18,404
Green Belt as % of England Total	14%	14%	13%	13%	18%	16%	18%	13%	14%	13%	11%	12%	14%	13%	15%	13%	20%	19%	15%	15%
Comparator Area Total	2,437	2,731	1,201	694	1,120	697	599	451	2,491	1,092	756	754	3,182	2,515	1,371	848	2,717	3,605	15,874	13,387
Comparator Area as % of England Total	12%	12%	8%	8%	11%	10%	11%	10%	11%	11%	7%	7%	11%	11%	12%	11%	11%	12%	11%	11%
All England Total	20,154	22,690	14,316	8,245	10,503	6,951	5,635	4,627	22,792	10,076	11,286	10,883	30,222	22,767	11,890	7,720	23,854	30,593	150,652	124,552

Source: June Agricultural Survey 2007

Cells containing information about less than five holdings are suppressed to avoid disclosure of personal information.

Table 23 – Livestock numbers and density

Green Belt Areas	Livestock numbers					Livestock density	
	Total Cattle	Total Sheep	Total Pig	Total Poultry	Total other eg horses, goats, farmed deer, donkeys, llamas	Livestock density including pigs & poultry (animals per ha of farmed area)	Livestock density excluding pigs & poultry (animals per ha of Green Belt area)
Avon	47,774	41,140	312,941	10,829	3,259	1.92	1.38
Burton upon Trent & Swadlincote	1,099	315	12	–	31	2.10	2.02
Cambridge	1,765	4,502	157,519	639	258	0.30	0.25
Gloucester & Cheltenham	4,176	3,986	54,121	5,991	325	1.42	1.27
London (Metropolitan)	80,372	148,094	1,211,014	41,314	24,976	0.92	0.52
North West	145,661	228,897	2,878,081	48,513	15,880	2.27	1.58
Nottingham & Derby	22,221	25,247	283,359	27,777	2,815	1.16	0.84
Oxford	5,904	11,061	5,966	3,528	1,736	0.77	0.55
SW Hampshire & SE Dorset	19,861	13,062	175,639	4,391	5,657	1.21	0.49
South Yorkshire & West Yorkshire	122,933	253,178	869,997	81,626	12,219	2.20	1.56
Stoke-on-Trent	51,713	29,569	33,562	9,441	2,334	2.50	1.91
Tyne & Wear	27,679	101,486	97,092	3,483	2,586	2.65	1.83
West Midlands	85,194	235,841	1,650,981	38,498	10,749	2.06	1.47
York	9,924	12,360	773,251	34,011	715	1.11	0.90
Green Belt Total	626,274	1,108,739	8,503,534	310,041	83,540	1.71	1.12
Green Belt as % of England Total	11%	7%	7%	8%	20%		
Comparator Area Total	565,623	1,250,036	10,281,775	354,545	52,196	2.01	1.41
Comparator Area as % of England Total	10%	8%	8%	9%	12%		
All England Total	5,597,559	15,436,577	128,742,687	3,943,444	423,793	2.31	1.64

Source: June Agricultural Survey 2007

Table 24 – Agricultural Land Quality

Green Belt Areas	Agricultural Land Classification (ALC) Grade								
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Non Agricultural	Urban	Total	% of G1 and G2
Avon	3,144	4,138	49,689	7,428	14	1,289	1,090	**66,792**	11
Burton upon Trent & Swadlincote		95	318	244		4	53	**714**	13
Cambridge	384	16,348	8,148	505		157	798	**26,340**	64
Gloucester & Cheltenham	148	453	5,257	641		120	75	**6,694**	9
London (Metropolitan)	8,428	57,853	284,551	43,762	128	74,400	14,619	**483,741**	14
North West	28,038	26,810	116,627	44,811	16284	5,700	8,909	**247,179**	22
Nottingham & Derby		9,454	32,110	14,587		2,656	1,382	**60,189**	16
Oxford	384	6,062	14,036	10,810	1126	877	433	**33,728**	19
SW Hampshire & SE Dorset		5,755	16,888	17,085	21015	17,740	382	**78,865**	7
South Yorkshire & West Yorkshire		39,615	109,168	67,670	17845	6,021	7,922	**248,241**	16
Stoke-on-Trent		1,432	21,116	19,721	356	565	646	**43,836**	3
Tyne & Wear		3,025	57,622	5,664	495	2,781	2,264	**71,851**	4
West Midlands	1,232	41,267	153,061	16,031	80	8,872	4,411	**224,954**	19
York		7,636	15,676	664	752	447	378	**25,553**	30
Green Belt Total	41,758	219,943	884,267	249,623	58,095	121,629	43,362	**1,618,677**	16
Green Belt as % of England Total	12%	12%	14%	14%	5%	19%	5%	**12%**	
Comparator Area Total	26,108	207,981	683,834	206,944	62,098	74,793	62,018	**1,323,776**	18
Comparator Area as % of England Total	7%	11%	11%	11%	6%	11%	7%	**10%**	
All England Total	354,644	1,849,258	6,291,711	1,840,315	1,100,784	657,209	952,319	**13,046,240**	17

Source: June Agricultural Survey 2007

Table 25 – Agri-Environment Scheme Uptake

	Total land with Agri-Environment Scheme Agreements (AES)				Classic Scheme Uptake			Environmental Stewardship Uptake							
Green Belt Areas	AES uptake (Combined Classic Scheme and Environmental Stewardship)	Utilisable Agricultural Area within Green Belt (ha)	AES as % of all Green Belt land	AES as % of UAA	Environmentally Senstive Areaa or Countryside Stewardship Scheme Agreements	% of total area covered	Average spend on all Classic scheme land (£ per ha)	Entry Level Stewardship	Entry Level plus Higher Level Stewardship	Higher Level Stewardship	Organic Entry Level Stewardship	Organic Entry Level plus Higher Level Stewardship	Environmental Stewardship Total	% of land with Environmental Stewardship	Average spend on all ES land (£ per ha)
Avon	27,926	47,884	42	58	4,924	0.29	5	20,203	791	40	3,507	351	**24,892**	37	15
Burton upon Trent & Swadlincote	372	506	53	74	0	0	0	372	0	0	0	0	**372**	32	15
Cambridge	15,655	21,493	59	73	3,252	0.19	7	12,587	1,680	27	365	153	**14,812**	56	21
Gloucester & Cheltenham	2,159	4,845	32	45	396	0.02	3	1,798	3		50		**1,851**	28	9
London (Metropolitan)	144,741	284,636	30	51	32,511	1.9	5	104,109	11,018	5,380	4,740	908	**126,155**	26	11
North West	78,144	162,200	32	48	16,859	0.98	4	62,060	3,438	276	3,204	138	**69,116**	28	10
Nottingham & Derby	21,941	41,977	36	52	3,407	0.2	2	18,494	1,285	254	292	72	**20,397**	34	12
Oxford	17,810	25,555	53	70	7,058	0.41	21	12,476	1,431	61	83	184	**14,235**	42	21
SW Hampshire & SE Dorset	34,781	48,019	44	72	20,574	1.2	13	9,644	2,641	2,866	595	18	**15,764**	20	24
South Yorkshire & West Yorkshire	77,758	178,369	31	44	16,307	0.95	5	59,977	3,776	2,541	722	109	**67,125**	27	11
Stoke-on-Trent	12,621	31,328	29	40	2,144	0.13	3	10,119	652	22	442	416	**11,651**	27	13
Tyne & Wear	35,127	50,898	49	69	6,051	0.35	5	30,253	1,072	35	1,087	332	**32,779**	46	15
West Midlands	89,873	159,887	40	56	18,237	1.06	4	73,514	5,868	1,785	2,593	274	**84,034**	37	16
York	11,628	20,218	46	56	2,411	0.14	4	10,902	152		31		**11,085**	43	14
Green Belt Total	570,536	1,077,815	35	53	134,131		5	426,508	33,807	13,287	17,711	2,955	**494,268**	31	13
Green Belt as % of England Total	9	12			8			10	6	21	6	4	**10**		
Comparator Area Total	551,458	916,279	42	58	137,784		10	388,954	45,371	6,727	21,821	4,044	**466,917**	35	16
Comparator as % of England Total	9	10			8			9	9	10	8	5	**9**		
All England Total	6,140,094	9,203,393	47	67	1,714,136		22	4,141,331	525,294	64,711	285,323	74,539	**5,091,197**	39	17

Source: June Agricultural Survey 2007

Table 26 – Natural England target areas for Higher Level Stewardship

Green Belt Areas	HLS Target Areas	% of all target areas in England	% of area which is targeted
Avon	16,168	0.3	24
Burton upon Trent & Swadlincote	114	0.0	16
Cambridge	13,840	0.3	53
Gloucester & Cheltenham	1,148	0.0	17
London (Metropolitan)	139,420	3.0	29
North West	25,772	0.6	10
Nottingham & Derby	20,653	0.4	34
Oxford	5,843	0.1	17
SW Hampshire & SE Dorset	57,032	1.2	72
South Yorkshire & West Yorkshire	33,600	0.7	14
Stoke-on-Trent	4,015	0.1	9
Tyne & Wear	9,510	0.2	13
West Midlands	33,839	0.7	15
York	3,103	0.1	12
Green Belt Total	364,057	7.7	22
Green Belt as % of England Total	8		
Comparator Area Total	413,566	8. 8	31
Comparator Area as % of England Total	9		
All England Total	4,711,499	100.00	36

Source: Natural England

Table 27 – National Inventory of Woodland and Trees (2002 data)

Green Belt Areas	Interpreted Forest Type										
	Broadleaved	Coniferous	Coppice	Coppice with standards	Felled	Ground prepared for planting	Mixed	Shrub	Young trees	Total Woodland	Total Woodland as % of Green Belt Area
Avon	3,961	1,120			16		225	99	395	5,816	9%
Burton upon Trent & Swadlincote	9								18	27	4%
Cambridge	286	22			4		255	34	101	702	3%
Gloucester & Cheltenham	88	13			7		2	3	37	150	2%
London (Metropolitan)	39,891	9,905	1,997	200	3,046	80	17,186	1,322	2,530	76,157	16%
North West	8,577	1,661	7		344	8	1,990	159	1,570	14,316	6%
Nottingham & Derby	2,560	1,452			124		482	6	442	5,066	8%
Oxford	1,310	307			60		1,063	44	170	2,954	9%
SW Hampshire & SE Dorset	11,175	7,284	51	13	1,110	38	4,444	366	538	25,019	32%
South Yorkshire & West Yorkshire	14,474	2,319			99		2,682	89	891	20,554	8%
Stoke-on-Trent	1,902	685			52		457	28	108	3,232	7%
Tyne & Wear	3,181	4,510			297		1,277	37	606	9,908	14%
West Midlands	9,251	5,165			360	14	2,034	140	1,041	18,005	8%
York	496	394			9		159	5	75	1,138	4%
Green Belt Total	97,161	34,837	2,055	213	5,528	140	32,256	2,332	8,522	183,044	11%
Green Belt as % of England Total	20%	12%	19%	9%	15%	3%	23%	16%	13%	17%	
Comparator Area Total	61,109	22,898	1,845	251	4,600	99	18,668	2,430	8,612	120,512	9%
Comparator Area as % of England Total	13%	8%	17%	11%	12%	2%	13%	16%	13%	11%	
All England Total	482,512	301,020	10,656	2,305	37,976	4,054	140,752	14,819	65,669	1,059,764	8%

Source: Forestry Commission

Table 28 – Community Forests

Green Belt Areas	Forest Area	Green Belt as Community Forest %
Avon	35,646	53.3
Burton upon Trent & Swadlincote	–	0.0
Cambridge	–	0.0
Gloucester & Cheltenham	–	0.0
London (Metropolitan)	23,735	4.9
North West	75,317	30.4
Nottingham & Derby	21,371	35.5
Oxford	–	0.0
SW Hampshire & SE Dorset	–	0.0
South Yorkshire & West Yorkshire	27,984	11.3
Stoke-on-Trent	–	0.0
Tyne & Wear	–	0.0
West Midlands	17,056	7.6
York	–	0.0
Green Belt Total	201,109	12.4
Green Belt as % of England Total	41	
Comparator Area Total	91,310	6.9
Comparator Area as % of England Total	18	
All England Total	494,038	3.8

Source: Natural England

Table 29 – Flood Risk Areas

Green Belt Areas	Flood Risk Type				
	Fluvial	Fluvial/Tidal	Tidal	Total	Land with flood risk %
Avon	3,003	29	3,173	**6,205**	9.3
Burton upon Trent & Swadlincote	28			**28**	3.9
Cambridge	2,306			**2,306**	8.8
Gloucester & Cheltenham	496			**496**	7.4
London (Metropolitan)	31,909	518	9,193	**41,620**	8.6
North West	15,279	921	8,704	**24,904**	10.1
Nottingham & Derby	7,464			**7,464**	12.4
Oxford	6,920			**6,920**	20.5
SW Hampshire & SE Dorset	5,590	273	1,426	**7,289**	9.2
South Yorkshire & West Yorkshire	14,395			**14,395**	5.8
Stoke-on-Trent	1,445			**1,445**	3.3
Tyne & Wear	4,050	44	23	**4,117**	5.7
West Midlands	10,788			**10,788**	4.8
York	2,621			**2,621**	10.3
Green Belt Total	**106,294**	**1,785**	**22,519**	**130,598**	**8.1**
Green Belt as % of England Total	14	2	4	**9**	
Comparator Area Totals	**92,590**	**10,428**	**47,859**	**150,877**	**11.4**
Comparator Areas as % of England Total	12	11	9	**11**	
All England Total	**758,412**	**98,951**	**539,195**	**1,396,558**	**10.7**

Source: Environment Agency

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