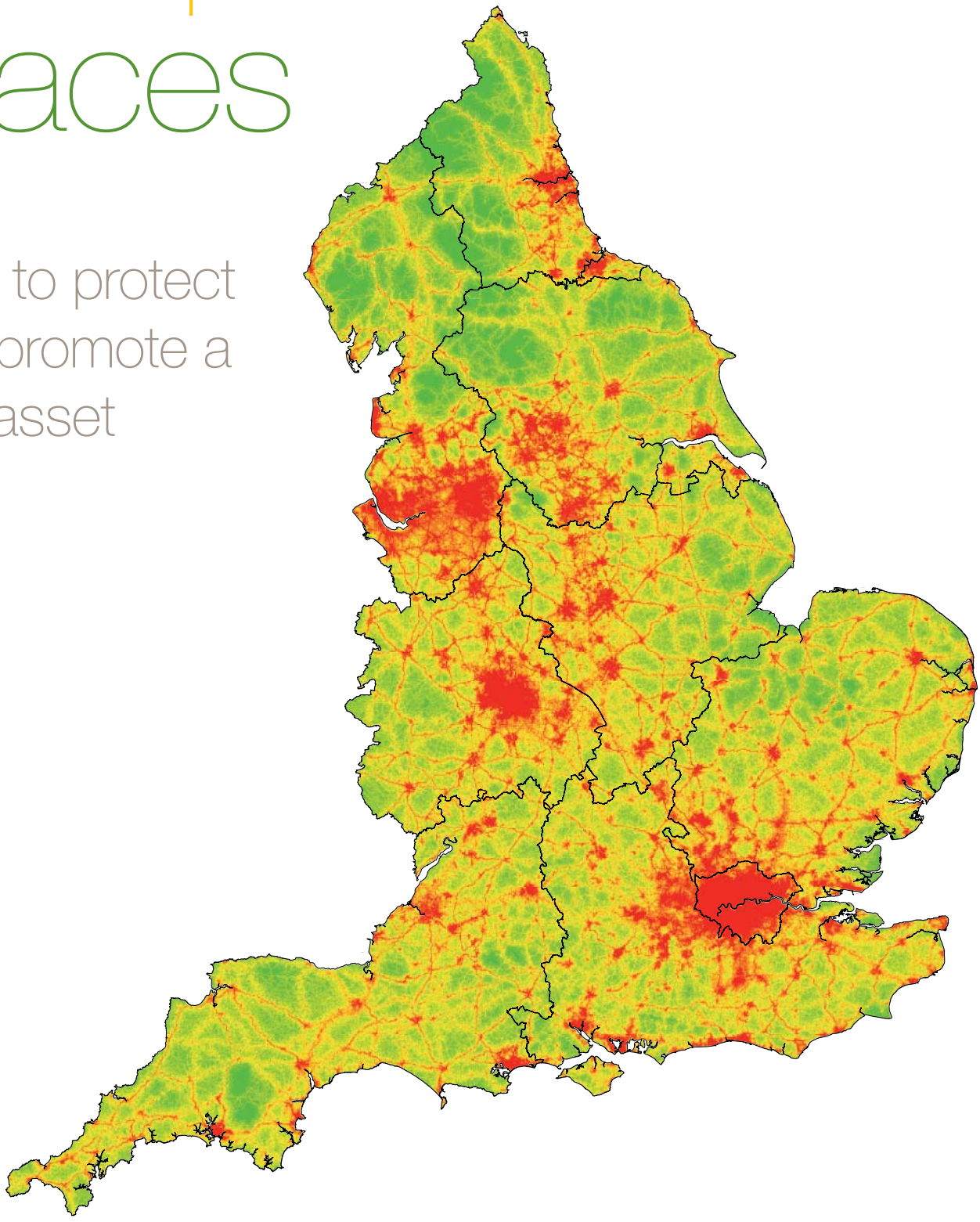
Campaign to Protect
Rural England

Saving tranquil places

How to protect and promote a vital asset





An opportunity to be seized

The Campaign to Protect Rural England (CPRE) has developed an accurate and effective way to measure one of the most important indicators of countryside quality and one of its most valued attributes: tranquillity.

This new measurement tool makes it possible to protect and enhance rural tranquillity through strategic spatial planning and individual development decisions.

There's no time to lose. Rural tranquillity is being threatened and diminished by a wide range of pressures. We invite you to contact us today to discuss how you can play an important part in protecting and reclaiming tranquillity for the benefit of us all.



Shaun Spiers
Chief Executive

Left: Hadrian's Wall, Northumberland National Park
Courtesy of Northumberland National Park Authority



Mountain bikers in Northumberland National Park
Courtesy of Northumberland National Park Authority

Tranquillity offers great rewards; we should act quickly to protect it

The human experience of the environment is central to our health and wellbeing and provides inspiration for many.

The quality of our experience of landscapes is determined predominantly by human decisions and actions. CPRE's identification more than 10 years ago of tranquillity as a key quality influencing that experience was a major breakthrough. Now we have developed a way of identifying, measuring and mapping tranquillity so that it can be integrated fully into public policy decisions.

A shared natural asset

Tranquillity is primarily a natural resource. It reflects the degree to which human beings experience the environment unhindered by disruptive noise, movement and artificial lighting and structures. In a densely populated, heavily built-up country like England it is scarce and its distribution is uneven.

We all want to experience tranquil countryside. It's why most of us visit rural areas, both specially protected areas as well as 'ordinary' countryside.[1] For many, the chance to experience tranquillity is what makes the countryside different from cities, suburbs and towns. When we seek to be in places which yield sweeping views, wide skies, proximity to water and close experience of wildlife, we are searching for tranquillity. It is one of the countryside's greatest gifts to us all – and among the most memorable and uplifting of experiences. Just as great art, design and traditions allow us to appreciate our identity, so tranquillity allows us to see, hear and feel the spectacular beauty of the natural world and its harmonious human influences.

Tranquillity:
The quality of calm experienced in places with mainly natural features and activities, free from disturbance from manmade ones.

Human beings have contributed substantially to the experience of tranquillity through millennia of altering the landscape in ways in harmony with its natural components. The presence of other people enjoying tranquillity in the countryside does little to compromise the quality of the experience outside tiny areas of concentrated visitor arrival and refreshment and a few of the most heavily pressurised tourist 'honeypots'. Tranquillity is a precious thing we can all enjoy and by doing so, we can help ensure this resource is protected. Seeking tranquillity can be the most sustainable recreational activity of all. And its wide availability is a sign of a sophisticated and successful society.

We can also find tranquillity in urban areas – in gardens, parks, allotments and local nature reserves. These green urban areas are a precious resource which should be safeguarded. But England's varied and beautiful countryside offers us a much wider opportunity to experience 'deep tranquillity'.

Good for our hearts, minds and bodies

In this country, stress and mental illness are increasingly common, as are physical health problems related to inactivity and obesity, including adult onset diabetes. According to the World Health Organisation, mental illness such as depression is likely to be the primary cause of ill health by 2020.[2] The associated costs to public health care are increasing. This is recognised in the overarching priorities of the Government's Public Health White Paper of 2004, which are to reduce obesity, increase exercise and improve mental health.

We believe efforts to protect and enhance tranquil areas would help the Government to address these priorities. There is growing and substantial evidence to show that exposure to nature can contribute to physical health and psychological wellbeing. While there are different levels of contact with nature – views of natural features, incidental exposure to nature and being active in a natural environment[3] – tranquil areas represent reservoirs of natural features. These provide access to a green environment which can offer a wide range of health benefits.

There is convincing evidence, for instance, of the importance of the natural environment in helping people to cope with stress and enhance psychological wellbeing. A recent review of over 100 studies showed that the primary reasons for visiting natural environments include escape from the stress of urban areas and the experience of tranquillity and solitude. In one study, teenagers under stress said they go outdoors to seek privacy and space to relieve stress.[4] Other studies have found exposure to nature helps people recover from drug[5] and alcohol addictions.[6]

Powerful evidence that tranquillity matters

Stress reduction may have long-term physiological benefits as well as mental health benefits, because stress is believed to reduce the body's ability to resist illness and may adversely affect our metabolism.[7] Exposure to nature has also been shown to reduce blood pressure, reduce heart attacks, increase mental performance and soothe anxiety. Studies have found that playing in natural surroundings has a positive impact on children's development.[8] And children who visit the countryside regularly are less likely to be obese[9] and to suffer from attention-deficit disorder.[10]

In contrast, studies have shown that artificial noise can have a damaging effect on mental wellbeing. In a survey of people living near airports, 30-60% of respondents at each site perceived their health to be affected by noise from aircraft at night.[11] The World Health Organisation recognises that people living near airports, industry or noisy streets are at risk of stress, sleep disturbance and increased blood pressure due to exposure to noise. This is supported by studies that show how unwanted noise from transport and industry can cause aggressiveness and a feeling of helplessness. It can hinder performance at work or school, in reading, problem solving, attention and memorising. The absence of discordant noise is an important characteristic of tranquillity.



A country lane, Sussex
CPRE/Robinson

'As natural green environments have increasingly come under pressure from economic development, so it seems our own wellbeing has suffered as a consequence.'[12]

Tranquillity underpins the economy of rural areas

Not only are there clear social advantages to protecting the tranquillity we all need and value, there is a compelling economic argument for it, too.

Rural areas rely on their tranquillity to attract visitors. According to a recent survey, it's why 49% of us visit the countryside.[13] Government data on the economic impact of rural tourism suggest that, through rural tourism, tranquillity directly supports 186,200 jobs and 12,250 small businesses and contributes £6.76 billion a year to the economy.[14] The importance of tranquillity to rural economies is borne out by a survey carried out in Norfolk. An examination of six nature reserves in north Norfolk found that the tranquillity of those sites alone brought £2.8 million into the local economy each year and underpinned 84 jobs.[15]

And tranquillity also contributes indirectly to the nation's economic performance by improving our physical and psychological wellbeing.

There's no time to lose

So far, there has been little initiative taken by Government to acknowledge or protect tranquillity. Despite a few honourable exceptions, the expansion of air travel and the trunk road network, and of energy infrastructure and distribution facilities, has overridden the interest of maintaining tranquillity. The decline of open cast mining and older industries has offered opportunities to reclaim some tranquil places while landscape restoration and redevelopment takes place. But the overwhelming tendency over the last 30 years has been to fragment and obliterate tranquil places and reduce this quality where it is still present.

But the Government has, at least, begun to recognise the importance of tranquillity. Its Rural Strategy, published in July 2004, says 'the countryside provides many benefits. It is valued for its wildlife, landscape and cultural heritage and also tranquillity'. Tranquillity is one facet of what the former Countryside Agency has termed 'countryside quality', being developed through its Countryside Counts project. The Government's Rural White Paper of 2000 promised the development of a countryside quality indicator that 'should include issues such as biodiversity, tranquillity, heritage and landscape character' – but tranquillity has yet to be used in any indicator.

Action needs to happen soon, because there are only a few substantial areas of tranquillity left in England.

The extent of areas with an absence of urban intrusion has declined dramatically in recent years. And the rate of decline of areas where it is possible to experience a relatively high level of tranquillity is accelerating.[16]

Tranquillity is under threat from the steadily increasing urbanised area, the development of the road network, the growth in road and air traffic and the expansion of energy infrastructure, including wind turbines. Noise, visual intrusion and light pollution are all growing as a result, remorselessly shrinking and fragmenting those remaining more tranquil areas of the countryside. Features that contribute to a sense of tranquillity are easily overwhelmed by the scale and power of such intrusions.

Most positive features of the countryside:

Tranquillity, say 58% of people
Scenery, say 46%
Open space, say 40%

source: Department for Environment, Food and Rural Affairs



River Browney, Durham
CPRE/Robinson



Upland sheep farming

Threat: New buildings and infrastructure

New housing consumes more countryside than any other kind of development. Government figures show a greenfield area the size of Southampton vanishes under bricks, mortar, concrete and asphalt each year – in a country which is among the world's most heavily built up. The Government has set a target of 200,000 additional homes a year by 2016, about 40,000 more than are currently built.

Threat: New roads, more cars

Government forecasts say traffic levels will increase by 30% between 2000 and 2015 if current trends continue – and traffic levels on rural roads are increasing faster than traffic on urban roads. Traffic on rural A roads increased by 2% between Q2 2005 and Q2 2006 and on minor rural roads by 1%. The Government has allocated billions of pounds to widen motorways, dual single carriageway roads and build new bypasses over the next decade. A number of these schemes are likely to affect protected landscapes, which often contain the most tranquil areas. The noise from a busy motorway can extend over hundreds of square miles of countryside.

Threat: More flights, flight paths and runways

The Government's Aviation White Paper of 2003 signalled a massive increase in air travel and the expansion of airports and associated development, with every region under threat of airport expansion. Air traffic in the UK has trebled over the past 20 years and is forecast to continue to grow at 4-5% each year in the future.

Threat: Increased light pollution

Dark, star-filled night skies are an important aspect of the experience of tranquillity – but our careless, fast-growing use of outdoor light is blotting out our view of the skies. A CPRE analysis of satellite data found that between 1993 and 2000 light pollution increased 24% nationally whilst the proportion of England's land area from which people could view a truly dark night sky fell from 15% to 11%.[17]

Threat: Inadequate funding for land management

There are growing concerns about the ability of farmers to find the resources necessary to manage landscape features in a way which protects and enhances the experience of tranquillity. At present, sensitive land management is under-funded. Research commissioned by the National Farmers' Union and CPRE found that the time farmers spent on unpaid landscape management across England each year was worth at least £412 million.[18]

Tranquillity in England

Our new tranquillity measurement tool enabled us to produce a detailed map revealing the likelihood someone would experience tranquillity in any locality. The method and the map can be used to identify, protect, enhance and reclaim places where we can experience tranquillity. In doing so, it can improve our quality of life, health, wellbeing and economic prosperity and contribute to sustainable development.

Many layers

The tranquillity map is made up of many layers of information based on what people say adds to and detracts from tranquillity, weighted according to how important those factors are and taking into account the country's topography. If you could peel away the layers, you would see maps which show the positive or negative impact on tranquillity of:

- a natural landscape, including woodland;
- rivers, streams, lakes and the sea;
- birds and other wildlife;
- wide open spaces;
- cars, motorbikes, trains and aircraft – and roads and railways;
- light pollution;
- towns, cities and villages;
- large numbers of people; and
- pylons, power lines, masts and wind turbines.

No two squares the same

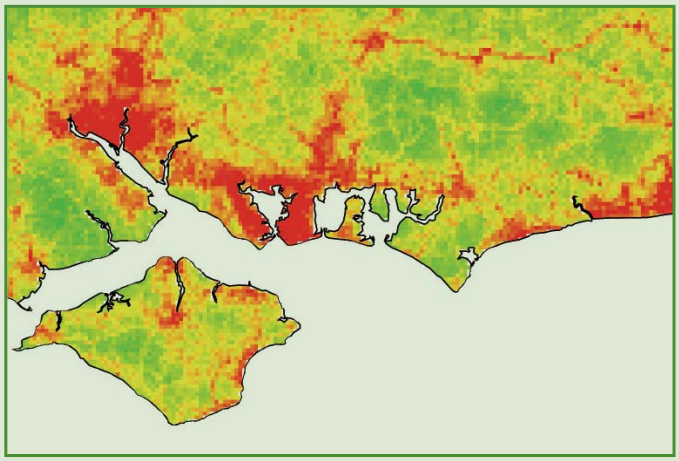
Each 500 m by 500 m square of England has been given a tranquillity score, based on 44 different factors which add to or detract from people's feelings of tranquillity. These scores have been colour coded – darkest green for those places most likely to make people feel tranquil, brightest red for those least likely. But squares that are the same colour and have the same score may differ markedly in the different 'components' of tranquillity – both positive and negative – which determine their overall score.

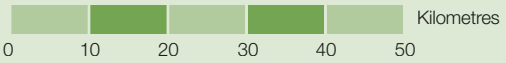
A national view

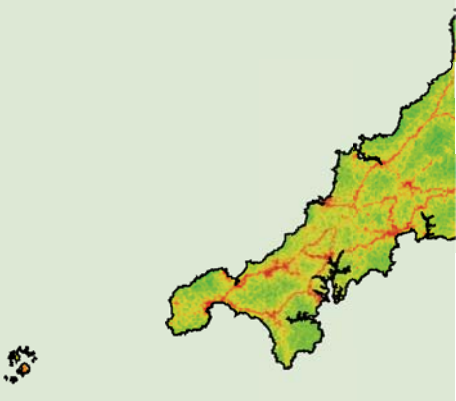
This map doesn't show us where on the spectrum one reaches a tranquil area or at which level there's zero tranquillity. Such a threshold point would be arbitrary. Of course, the deepest green areas are places where we are most likely to experience tranquillity, but it would be wrong to suggest that in a heavily built-up area, a nearby spot of 'medium' tranquillity isn't highly valuable to people – and in need of protecting or enhancing.

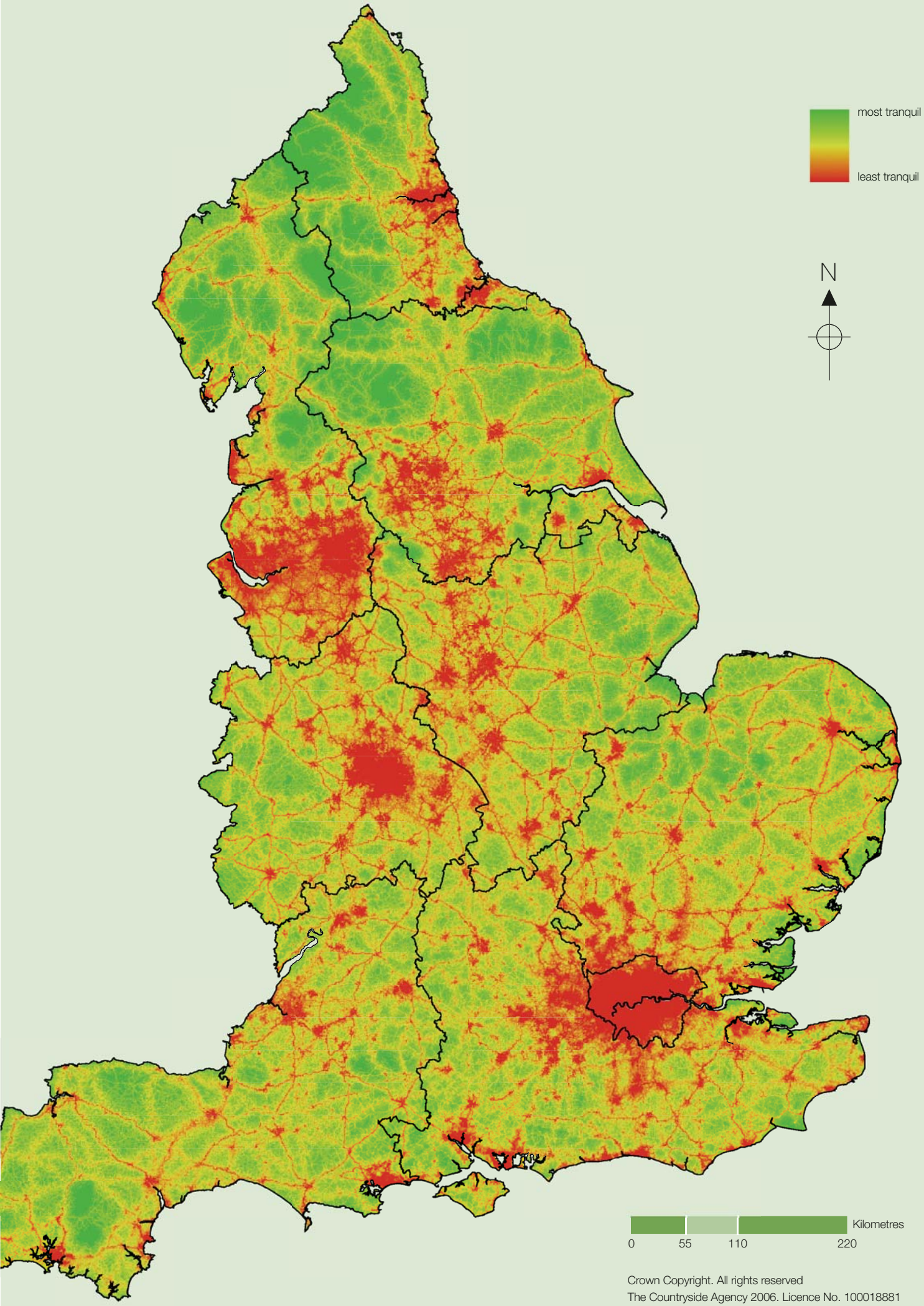
Detailed results

A close-up of the Isle of Wight, the Solent and the New Forest, showing a range of tranquillity from the conurbations of Southampton and Portsmouth to the depths of the New Forest and the most rural areas of the Isle of Wight and the South Downs.









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Our tranquillity maps explained

CPRE commissioned researchers to create a highly detailed national tranquillity map based on a new measurement approach.

The researchers – from Northumbria University's Centre for Environmental and Spatial Analysis and Participatory Evaluation and Appraisal in Newcastle upon Tyne and Newcastle University's Landscape Research Group, in collaboration with Bluespace Environments, Durham – had carried out a detailed pilot study of tranquillity in the North East in 2004 and a follow-up study in the Chilterns a year later.

CPRE's national project has developed and extended this work. It has two main parts. Firstly, the researchers used a nationwide survey to test what tranquillity means to people and their perceptions of what factors were most likely to add to and to detract from their sense of experiencing tranquillity when they visited the countryside. Secondly, using a Geographical Information Systems (GIS) model, they associated the survey information with a range of national datasets and took account of topography to create a map showing how likely each locality was to make people feel tranquil.

Countryside near Medomsley in the West Durham Coalfield
CPRE/Brabbs



Survey shows what tranquillity is

To provide a national context to what tranquillity means to people and where they could find it, five districts in England were chosen as consultation areas, with surveys and research carried out at four 'countryside access points' such as car parks for countryside visitor centres in each district. The five districts were Harrogate (North Yorkshire), West Lindsey (Lincolnshire), Swale (Kent), Mid Devon (Devon) and Stratford upon Avon (Warwickshire).

The locations were selected on the basis of their landscape characteristics and the range of factors present at each site which might affect people's experience of tranquillity in the countryside – such as air traffic, urban expansion, recreational pressures and busy roads.

The surveys involved interviewing more than 1,300 countryside visitors. Question and response options for the national study were developed from earlier in-depth participatory appraisal work to explore people's perceptions of tranquillity undertaken in the North East and the Chilterns. This participatory appraisal work was centered around four main questions: What is tranquillity? What adds to it? What is *not* tranquillity? What lessens it? The main factors affecting people's feelings of tranquillity in the countryside are shown in the box on this page.

Thresholds help understanding

The concept of noise and visual thresholds played an important part in the mapping exercise. Earlier research had shown that there are significant sound thresholds; when noise levels rise above a threshold people experience significant disturbance. But there was limited evidence about people's visual thresholds relating to tranquillity – about how much intrusion of manmade structures into largely natural landscapes people can tolerate before it significantly reduces their experience of tranquillity. So the researchers questioned people using photographs of manmade structures at various distances in the landscape and gained an understanding of these visual thresholds.

Maps bring together detailed information

From the survey and the work on thresholds, the researchers knew which factors made people likely to experience tranquillity, which factors made them less likely to and the relative importance of both. It was also possible to give a weight to each factor, according to the information gathered by the surveys. To use these 44 factors to create a tranquillity map, the researchers needed to quantify them. They did this by using geographical data which correlated with the positive and negative tranquillity factors, using a Geographical Information System (GIS). For example, taking account of the topography of England, they mapped the noise impacts of different grades of roads. To give another example, they gathered data on locations of high voltage pylons and then used average heights of pylons and the understanding they had gained of visibility thresholds in order to map the impact pylons have on people's experience of tranquillity.

The end result was to assign each 500 m by 500 m square of England a positive score for the factors in and around it contributing to feelings of tranquillity, and a negative score for those local factors detracting from tranquillity. Combined, they gave each square an overall score measuring how likely the environment in that square was to make people feel tranquil.

Our mapping tool is still a work in progress, but it goes further than any other methodology to measure overall tranquillity. We would welcome efforts by others to improve on it.

What tranquillity is – the top 8 survey responses

1. Seeing a natural landscape
2. Hearing birdsong
3. Hearing peace and quiet
4. Seeing natural looking woodland
5. Seeing the stars at night
6. Seeing streams
7. Seeing the sea
8. Hearing natural sounds

What tranquillity is not – the top 8 survey responses

1. Hearing constant noise from cars, lorries and/or motorbikes
2. Seeing lots of people
3. Seeing urban development
4. Seeing overhead light pollution
5. Hearing lots of people
6. Seeing low flying aircraft
7. Hearing low flying aircraft
8. Seeing power lines

Tranquil spots aren't empty

Tranquillity is not the absence of all noise, activity and buildings. Our research has found that many rural activities, such as farming and hiking, and many natural noises, such as birdsong, the wind moving through trees and cows lowing, are compatible with and enhance people's experience of tranquillity.

Much can be done to reclaim, enhance and protect tranquillity

Tranquillity can be measured, mapped, valued and protected. It can even, on occasion, be enhanced. This will not happen through good will or warm words, but through concerted and effective action.

We call on all people with a responsibility for protecting our environment, countryside and quality of life to take on the challenge and secure this powerful but fragile resource for all of us and for future generations.

Action is possible at all levels

The new methodology is a potentially powerful tool for spatial land use and landscape planning. It has implications for targets, indicators, policies and plans relating to quality of life, countryside quality, landscape strategies, environmental management, spatial development and sustainable development:

- **Government** should use this tranquillity methodology as a basis for including tranquillity in a measure of the quality of the countryside;
- **regional assemblies** should use the methodology when developing policies in spatial and transport strategies;
- **local authorities,** including unitary and National Park authorities, should use the tool when preparing Local Development Frameworks and making decisions on planning applications; and
- **county councils and unitary authorities** should take tranquillity into account in their local transport plans and mineral and waste development frameworks.



Beacon Hill, South Downs
CPRE/Robinson

National leadership needed

In the *Rural White Paper 2000* the Government recognised the contribution of tranquillity to the character of the countryside. It promised to develop measures to promote it, to publish a measure of change in countryside quality, to review progress in protecting and enhancing the countryside and to include issues such as tranquillity in this measure. It's time the Government lived up to that promise.

There are several ways the Government could take forward our work on tranquillity.

A Public Service Agreement – or equivalent measure – for countryside quality that includes tranquillity as an indicator should be a core objective of the Department for Communities and Local Government, the Department of Health and the Department for Environment, Food and Rural Affairs.

The Government's Sustainable Development Strategy should in future include a strong commitment to safeguard and improve a high quality of *experience* of the environment for everyone. The human experience of the environment – with tranquillity as an important component – should be recognised within the strategy for protection and enhancement of natural resources. Its cross-cutting nature should be recognised through integration with other dimensions of the overall strategy. A tranquillity indicator should be developed for inclusion within the UK Framework Indicators.

And the forthcoming UK Noise Strategy should specifically address rural tranquillity and recognise the harm intrusive noise does to people's experience of it.

Planning policies should be strengthened

It is vital that spatial planning takes full account of the need for tranquillity and the implications for development of reducing the destruction of tranquillity. In our crowded country, where competing demands for the use of land escalate by the year, it is all the more important not to let tranquillity be destroyed by default.

The need to protect and enhance tranquil areas should be a prominent feature of a revised Planning Policy Statement 7: *Sustainable Development in Rural Areas.* The implications for tranquillity of the location of development in the countryside as

well as associated traffic generation, light pollution and noise should be highlighted.

In the forthcoming review of Planning Policy Guidance 4: *Industrial, commercial development and small firms,* the Government should recognise the importance of protecting tranquillity by specifying that tranquil areas are not suitable locations for significant development of commercial, industrial and distribution structures.

Planning Policy Guidance note 24: *Planning and noise* should be reviewed at the earliest opportunity to recognise the need to protect rural tranquillity.

Planning Policy Statement 22: *Renewable Energy* should be revised to ensure that new wind turbine installations are steered away from remote and tranquil areas where their attendant earth works, construction roads, fences, lighting at night, pylons and power lines all combine with the turbines themselves to diminish people's experience of tranquillity.

The Government has long promised an annex covering light pollution for Planning Policy Statement 23: *Planning and pollution control.* It has acknowledged the importance of reducing the cumulative growth of light pollution. The annex should include a clear policy on the standards required for exterior lighting of new development, a rigorous assessment of the need for external lighting for infrastructure and detailed guidelines on the situations in which external lighting is not appropriate.

Regional planning has a role to play

As the regional planning bodies, regional assemblies can and should play a major role in the protection of tranquillity and tranquil areas. Tranquillity should be recognised within Regional Spatial Strategies as a major economic asset, a fundamental natural resource and an essential contributor to health, wellbeing and quality of life. As regional assemblies review and develop their spatial strategies there is scope to incorporate protection and enhancement of tranquillity within their vision, objectives, main aims and policies.

Tranquillity should be protected with specific policies, as in the North East's Regional Planning Guidance: 'Development Plans and other strategies should: identify those areas where the maintenance of tranquillity is both important and practical; and protect and, where appropriate, increase tranquil areas throughout the region when formulating policies for land use, transport and traffic management.'[20]

In addition, regional assemblies should ensure that Regional Spatial Strategies include strategic key criteria for identifying



Atherington, Sussex
CPRE/Robinson

broad areas where onshore wind turbines development could be considered and the criteria should cover noise and visual effects. Local planners should incorporate such criteria into their Local Development Frameworks.

Tranquillity protection should also be integrated with related policies such as tourism, leisure, health, economic and rural issues. Maps using our new methodology should be used to effectively monitor progress on protection and, where applicable, enhancement of tranquil areas.

Local planning is critical to tranquillity

Local authorities can protect tranquillity and tranquil areas by:

- including policies in their Local Development Frameworks; and
- using tranquillity maps when making decisions on planning applications. The extent and form of development in the landscape can make a significant difference to the degree of damage to tranquillity that is caused.

Tranquillity should be protected in Local Development Frameworks as a key environmental asset and characteristic of the countryside. Tranquillity is currently recognised and protected in policies in the local plan planning documents of over 30 local authorities. For example, Maldon District has an explicit policy: 'The natural beauty, tranquillity, amenity and traditional quality of the District's landscape will be protected, conserved and enhanced'.[21]

For local councils covering substantial rural areas – and that will include many predominantly urban councils – tranquillity protection policies should be included and tranquillity specified as a cross-cutting feature requiring protection in a range of associated policies, such as those relating to quality of life, sustainable development, noise and light pollution, biodiversity, recreation, tourism and economic development. Maps developed using the new methodology should be used as part of the evidence base for local planning, within the proposals map to identify tranquil areas and as indicators within area action plans.

Local authorities should also ensure that local area agreements recognise the role of tranquillity in economic development and healthier communities, and incorporate plans to protect, enhance and reclaim it.

This tranquillity methodology and map can also be used in development control, as a basis for improving proposed new development – by insisting its impact on local tranquillity be reduced – or by refusing inappropriate development. Many planning authorities have refused permission for a variety of developments because of the harm they would cause to tranquillity.[22] This new methodology will strengthen their arguments.

The map can be disaggregated into component maps that help planners to better understand why a location has the tranquillity score it does. This knowledge can help planners to understand the positive or negative gains to be had from certain decisions about development. For example:

- when planners are considering a proposal for electricity transmission infrastructure or wind turbines, a map of the visibility assessments would show the visual impact of the proposed development;

- if an otherwise tranquil area has its tranquillity affected by the noise of lorries and cars using a small rural lane, the local authority could designate the lane a Quiet Lane and reroute traffic to larger roads; and

- in the event of a quarry no longer being worked planners could use the measurement tool to see how the tranquillity of the area would be improved when mineral extraction ceased. This would strengthen the case for steering subsequent damaging development away from the site.

Local organisations are important, too

Other organisations can also take action to safeguard tranquillity. Parish councils can put policies into their parish plans and village design statements, and work to get these documents adopted as supplementary planning documents. Partnerships and joint committees for Areas of Outstanding Natural Beauty (AONBs) can put policies into their management plans and can use these to influence local planning policies and decisions on planning applications. Such policies already exist in many plans. For example, the master plan for the Cranborne Chase and West Wiltshire Downs AONB contains a policy to 'promote land use policies that conserve and enhance tranquility'. And the parish plan for Little Wenlock, Shropshire says it will encourage efforts to maintain the viability of the area, providing activities aren't likely to 'cause significant changes to the character of the countryside, the tranquillity of the environment or the amenity of parishioners'.

CPRE will continue its work

The publication of our national tranquillity map marks the launch of a long-term campaign for CPRE, one which involves a great deal of work from the district to the national level. We are committed to offering positive, practical solutions and to working collaboratively with policy makers to find ways to protect, reclaim and enhance our tranquil areas. We won't stop until we've succeeded. Won't you join us?



Walkers in Northumberland National Park
Courtesy of Northumberland National Park Authority

Endnotes

[1] In a survey by the Department for Environment, Food and Rural Affairs, tranquillity was identified by 58% of respondents as an enjoyable aspect of the countryside and was the most common reason for visiting it (DEFRA, *Survey of Public Attitudes to Quality of Life and to the Environment: 2001,* 2002). A 2004 Mori poll for the National Trust survey (called Landscapes in Britain) found that 49% of visitors to the countryside go there seeking peace and quiet.

[2] World Health Organisation, *World Health Report 2001 & 2002,* cited in Pretty, J, Griffin, M, Peacock, J, Hine, R, Sellens, M, and South, N, 'A Countryside for Health and Wellbeing: The Physical and Mental Health Benefits of Green Exercise – Executive Summary', *Countryside Recreation,* Volume 13 Number 1, Spring 2005.

[3] Pretty et al, 2005

[4] 16-21 year olds stressed from studies, family and personal problems cited going outdoors to seek privacy and space as one of their most common stress-relieving strategies. Institute for Health Research, Lancaster University, *Climbing trees and building dens: Mental health and well-being in young adults and the long-term effects of childhood play experience,* Forestry Commission, 2004

[5] Kennedy, 1993, cited in Morris, N, *Health, Well-Being and Open Space, Literature review,* Open Space, 2003

[6] Bennett LW, Cardone S, Jarczyk J, 'Effects of a therapeutic camping program on addiction recovery. The Algonquin Haymarket Relapse Prevention Program', *Journal of Substance Abuse Treatment* 15 (5), 1998 (cited in Morris, 2003)

[7] Parsons, R, 1991, 'The potential influences of environmental perception on human health', *Journal of Environmental Psychology,* 11:1-23 (cited in Jorgensen, A, *Why is it important to encourage nature and wildlife near the home?* 2001)

[8] Bang et al, 1989; Grahn, 1991; Fjortoft, 1995, 1998, 1999; Grahn et al ,1997, cited in Jorgensen, 2001 op. cit

[9] Bird, W, presentation to CABE Health Week conference, May 2006

[10] Faber Taylor, A, Kuo, F, Sullivan, C, 'Coping with ADD: The Surprising Connection to Green Play Settings', *Environment and Behavior,* Vol. 33, No. 1, 54-77, 2001, and Bird, W, op.cit

[11] Diamond, I, Stephenson, R, Sheppard, Z, Smith, A, Hayward S, Heatherley, S, Raw, G, and Stansfeld, S, *Perceptions of Aircraft Noise,* Sleep and Health, Civil Aviation Authority, 2000

[12] Pretty et al, 2005

[13] Mori, *Landscapes in Britain,* poll, 2004

[14] Figures in *The Rural Strategy 2004* suggest that rural tourism nationally supports around 380,000 jobs and 25,000 small and micro businesses; and contributes around £13.8 billion annually to the economy

[15] RSPB, *Valuing Norfolk's coast – environment, wildlife, tourism, quality of life – The economic benefits of a high quality environment,* 2000. The 84 jobs were found to be equivalent to 60 full time jobs. The figures were derived from the total contribution to the local economy of tourists going to those six sites and the proportion of visitors who stated their main reason for visiting was tranquillity.

[16] In 1995 CPRE published intrusion maps which showed a decline in areas unaffected by urban intrusion of 21% between the early 1960s and the early 1990s.

[17] CPRE, *Night Blight!* 2003

[18] CPRE, *Living landscapes: Hidden costs of managing the countryside,* 2006

[19] Participatory appraisal as applied by PEANut at Northumbria University is 'an approach to consultation focused on exploring people's perceptions, values and beliefs and designed to allow participants to express these in their own words… Non-directive questions are used to encourage people to discuss their attitudes in ways that do not impose external opinions upon them'. (Jackson, S, Fuller, D, Dunsford, H, MacFarlane R, and Haggett, C, *Tranquillity Mapping: developing a robust methodology for planning support,* Centre for Environment and Spatial Analysis, Northumbria University, Bluespace environments and the University of Newcastle upon Tyne, 2006

[20] Government Office for the North East, *Regional Planning Guidance for the North East,* 2002

[21] Maldon District Replacement Local Plan, 2005

[22] A few examples: in 2003, a Planning Inspector dismissed an appeal against the decision to refuse a proposal for floodlighting in Sheffield. He concluded that the lighting 'would remove any prospect of tranquil darkness which residents should reasonably expect'. In 2003, Dover District Council Planning Committee refused a proposal for change of use from open farmland to aviation facilities because the proposal would 'detract from the area's existing tranquil qualities'. In 2004, the Development Control and Environmental Protection Committee at Shrewsbury and Atcham Borough Council rejected a proposal to convert existing farm buildings into business use because the development would have 'a detrimental impact on the tranquil undeveloped character of this part of the Area of Outstanding Natural Beauty'.

Tranquillity matters

Tranquillity matters – to all of us, for all kinds of reasons.

We all need places where we can 'get away from it all'. These tranquil places are important for our mental and physical health, our wellbeing and our economy. CPRE's new approach to measuring and mapping tranquillity offers an important new way for Government and policy-makers at all levels to protect and enhance our priceless, increasingly threatened tranquil countryside.

Much of what CPRE has achieved has only been possible due to financial support from people who care about the countryside. To find out how to support CPRE, including information on donating, becoming a member, leaving a legacy, corporate membership or volunteering, please ring supporter services on 020 7981 2870, email supporterservices@cpre.org.uk or visit us online: www.cpre.org.uk/support-us.



Campaign to Protect Rural England



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This report is part of CPRE's tranquillity campaign. More campaign materials, including a CD and leaflet, and more information about the campaign can be found on our website: www.cpre.org.uk.

CPRE is grateful for the support of the Esmée Fairbairn Foundation and the Ecology Trust in making this campaign possible and for the assistance of the Countryside Agency.

October 2006

ISBN 1 902786 86 6

£5.00

Design: www.thiswayupdesign.co.uk