



**Audit of Access and Greenspaces for the Durham  
Magnesian Limestone Plateau**

**Summary and Recommendations**

**Commissioned by the  
Limestone Landscapes Partnership**

Summary of the report by The Access Company

March 2009



The following summary and recommendations are extracts of a report commissioned by the Limestone Landscapes Partnership. The full report and appendices are available from the partnership on request.

## 1 Summary

The report describes the work undertaken to audit access and greenspaces in National Character Area (NCA<sup>1</sup>) 15, and presents the findings. The work can be viewed in three stages:

- 1) GIS data collection from partner organisations and local authorities
- 2) Data handling to create typology datasets
- 3) Data analysis using Accessible Natural Greenspace Standards (ANGSt)

Over 590 MB of source GIS data was collected in approximately 170 datasets from more than 30 partner organisations<sup>2</sup>. These datasets were filtered and combined to form six typology datasets below :

- 1) Parks & Gardens
- 2) Natural & Semi-Natural Greenspace
- 3) Amenity Greenspace
- 4) Churchyards & Cemeteries
- 5) Woodland
- 6) Access (linear access routes)

Together the typologies represent 3062 individual parcels of greenspace, totalling over 24,310 hectares (243 km<sup>2</sup>), or 5 MB.

The data was combined to form one master set comprising all accessible natural greenspace in the NCA over two hectares in size. This master set was used for the ANGSt analysis.

There are few published examples of implementation of the ANGSt analysis and toolkit<sup>3</sup>, the approach taken for this project was experimental and designed to fit the needs of the Limestone Landscapes Partnership. The scope of the project was limited by available resources, requiring a methodology to be developed which could be applied across the area without necessitating site visits.

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<sup>1</sup> Formerly known as "Joint Character Areas"

<sup>2</sup> The study would not have been possible without the cooperation and support of the local authorities and partner organisations who supplied the data.

<sup>3</sup> English Nature ANGSt report (Accessible Natural Green Space Standards in Towns and Cities: A Review and Toolkit for their Implementation 2003) <http://www.english-nature.org.uk/special/lmr/pdf/GreenSpaceReport.pdf>

Accessible Natural Greenspace Standards for towns and cities (ANGSt) analysis of the data was carried out to identify areas where the resident population do not have adequate access to greenspace. The results revealed that provision is variable, with some areas poorly served and others well served. The population of the NCA has good access to medium sized greenspace. Access to Local Nature Reserves (LNR) is adequate for the area as a whole, but 89% of the population do not have an LNR in their immediate neighbourhood. Access to large countryside sites is limited, in particular in the west of the area. In addition a significant number of small areas have poor access to sites close to where they live, the population of Sunderland are particularly poorly served. It should be remembered that ANGSt has been developed for towns and cities, the results may show rural areas as having poor access when in reality the community are surrounded by greenspace.

Access to the higher quality natural greenspace is not consistent across the area, with large areas having no access to local sites.

A summary of the ANGSt findings concludes that :

- The NCA as a whole has adequate access to Local Nature Reserves<sup>4</sup> according to the ANGSt criteria. Within the NCA spatial distribution of this adequacy varies with some areas having poor access to Local Nature Reserves. Approximately ninety percent of Super Output Areas (areas with a population of 1500 people) do not have a Local Nature Reserve. Coverage is poorest across the centre of the NCA.
- The population of the NCA generally have good access to medium sized greenspace - only a few small areas of the NCA do not meet the criteria for access to greenspace over twenty hectares. However, a significant area of Sunderland does not have adequate access to greenspace of this size within two kilometres of home.
- Access to greenspace within five minutes walk of home is a significant measure, impacting on the health and well-being of the community. A significant number of small areas of the NCA do not have access to sites close to their homes; fewer people have access to higher quality sites.
- Access to large sites (over 500 hectares) is limited to the population living on the east of the NCA, as the only significant sites of this size are along the coastline. Using ANGSt criteria the population living in the west of the NCA do not have adequate access to large sites. (Data was collected from within

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<sup>4</sup> ANGSt standards are used to assess the availability of greenspace to local people. A key measure is the amount of Local Nature Reserve (LNR) per 1000 people. The ANGSt standard is for one hectare of LNR per 1000 people. This is just met within the NCA which has 1.015 hectares per 1000 people - although spatially the distribution can vary greatly. If the NCA was a slightly different shape, the result could change radically. See section Error! Reference source not found. of this report.

the NCA, and a ten kilometre buffer zone around the edge to ensure that the methodology worked across the whole NCA.)

Public rights of way and other linear access are well distributed across the area, providing areas for exercise and an ability to walk through green areas even where no designated sites exist. In particular the railway walks provide popular, safe and easy access to greenspace for many people. However this network is fragmented in places, in particular the bridleway network. There are also barriers which restrict access including main roads, motorways and railways. These are discussed in the region's Rights of Way Improvement Plans, but have not been explored in depth in this study. A more detailed analysis of access to greenspace taking such barriers into consideration is likely to conclude that access is not as good in some areas as the preliminary findings suggest.

ANGSt is only one approach to determining access to greenspace; others are referred to in the report in particular the Woodland Trust's Woodland Access Standard which analyses access to woodland. Applying this standard to the authority areas covered by the NCA the report concludes that some 180 hectares of additional woodland are required.

- About 100 hectares of new woodland creation is needed in order to meet the standard of access to two hectare sites within 500 m of home;
- Eighty hectares of new woodland is needed in Darlington to meet the 20 hectares within 4 kilometre standard, 40 hectares are needed in Durham County (in the Sedgfield and Wear Valley districts), a further 40 hectares needed in both Sunderland and Hartlepool, and 20 hectares in South Tyneside.
- Easington, Hartlepool already nearly meet the standard for access to 20 hectare woodland. Sedgfield, Teesside, Durham City and the Wear Valley would meet the standard if all areas of local woodland were publically accessible.
- There is greatest need for new woodland creation in Darlington - where less than 2 percent of the population already have access to 20 hectare sites within 4 kilometres. There is also need for woodland creation in Sunderland and South Tyneside.

Both studies conclude that additional access to greenspace both close to home, and to larger sites within 10 kilometres of home is desirable in order to ensure the population benefits fully from the recognised physical and mental health benefits of greenspace.

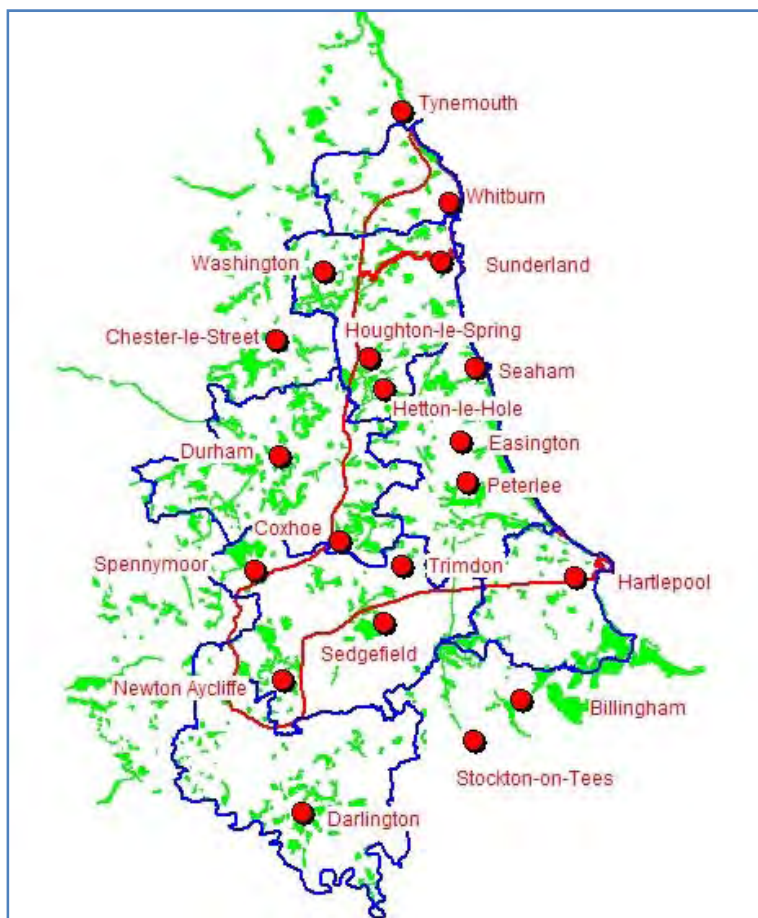
Both studies only consider sites above 2 hectares in size. There are a large number of smaller sites, for example 81 percent of amenity greenspace in the NCA is smaller than 2 hectares, as are 74 percent of cemeteries. Access could be

improved by adding to existing small sites; through negotiating public access to existing private land; or through creating new sites either in their own right, such as new Local Nature Reserves, or to join existing sites and create additional larger spaces.

Small illustrative maps have been used in the body of the report to indicate the geographical distribution of various greenspaces; more detailed maps are supplied in Appendix 10.

Some areas stand out as having poor access to the more natural sites, for example the area around Sunderland is well supplied with amenity greenspace, and parks and gardens, but has poor access to natural and semi-natural sites, and woodland. The roughly triangular area between Spennymoor, Newton Aycliffe and Sedgefield shows a similar pattern.

The report identifies a number of recommendations which, if implemented, would improve the dataset, increase access to sites, and increase public awareness of where they can go to enjoy greenspace.



Map 1 - combined areas of greenspaces > 2ha

## 2 Recommendations

### 2.1 Improving the quality of the greenspace data

The data collected through this project represents a powerful tool, however assumptions have been made, and attributes have been given to sites based on broad assumptions. While these assumptions are based on sound judgements, the value of the data would be strengthened if some of the assumptions were tested.

The source data was collected by partners for a number of purposes, none of which match exactly the needs of this project. There is a small chance that sites have been missed, or that some sites included in the datasets should be removed.

#### Recommendations

Test assumptions about quality through identifying a geographical area with a mix of sites, and visit these sites and record actual quality scores for naturalness and access. During this process any sites which should not be included would be identified.

The data needs to be updated based on local knowledge, this could be done piecemeal as it is used and new information becomes available. An alternative approach could be to share the data with local authority staff or volunteers (for example Local Access Forum members) with the aim of adding to the information. Examples of where this will add to the data include; sites which are not included in the datasets, sites with no name, sites with unknown access arrangements, sites with low confidence scores relating to quality scores, sites with no known landownership, and amenity spaces with no attribute data describing their purpose.

### 2.2 Refining the quality scoring

The approach to scoring naturalness and access quality was based on a number of assumptions in the absence of any primary information sources. At present the datasets have four columns (Naturalness quality, Naturalness confidence, Access quality, Access confidence) with high, medium and low scores.

The GI Planning Guide <sup>5</sup> introduces a matrix for quality of greenspaces and green infrastructure, (see Appendix 5, section 2), containing nine boxes of actions to move towards a desired state. This matrix neatly combines quality and

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<sup>5</sup> GI Planning Guide, pages 25-6

infrastructure (access) into one action for each site. A similar approach could be taken for this data, which would need to be amended accordingly.

### Recommendation

The high-medium-low scores in the typology datasets could be substituted for actions taken from the GI matrix. This would combine 'naturalness quality' and 'access quality' into one action, which would translate well into action-planning.

### 2.3 Refining the data for local use

The scale of this project meant that a broad approach has been used to determine access, for example access barriers and site access points have not been considered. These may be particularly relevant to people living close to main railway lines, motorways or dual carriage ways. It is likely that some communities have poorer access to greenspace than the results of this project suggest.

Further analysis is required to determine if the areas appearing to be deficient in greenspace have good access to linear routes. It may well prove to be easier to create linkages through new sections of linear access (for example through permissive path agreements or higher level stewardship agreements) than to create new areas of greenspace

The GI Planning Guide<sup>6</sup> recognises the importance of connectivity and uses a modified form of ANGSt, adding an additional point to the standard :

- That adjacent greenspaces are interconnected; the priority and extent being determined by local decision-making informed by stakeholder involvement.

### Recommendations

Test the impact of barriers on access to greenspace. Re-run the ANGSt analysis in an affected area at a smaller scale, taking account of road and rail crossings, and the locations of access points into larger sites. If a significant difference is detected, consider using this approach along main road and rail corridors.

Use the linear access dataset as an overlay on areas appearing to be deficient in greenspace, and note any areas which do not have good linear access. These areas will be those that are truly deficient.

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<sup>6</sup> GI Planning Guide, page 10

Consider further analysis of the interconnectivity of greenspaces as suggested in the GI planning guide.

## 2.4 Matching datasets to local needs / opportunities

The ANGSt analysis and interpretation outlined in this report uses assumptions and Lower Level SOAs to approximately calculate the population of the NCA and a broad indication of LNRs per 1000 people. Two of the main assumptions are that population is evenly distributed within each SOA, and that the population of each SOA is 1500 people.

The analysis is not linked to more sophisticated information about population density or local deprivation - in areas of high deprivation it is likely that health inequalities are higher and that car ownership is lower, so improving access or quality of greenspaces in these areas would target investment with the greatest impact.

A more sophisticated approach to population, adequacy and forward-planning would give greater confidence in the results and would target site-based action-planning to local needs, so that most people benefit. Extra dimensions would be added to the analysis.

### Recommendation

GIS could be used further, to overlay information relating to population density (from census), or Indices of Multiple Deprivation (IMD)<sup>7</sup>. The methodology described in the GI Planning Guide could be followed<sup>8</sup>.

## 2.5 Links to the Planning System

This audit has identified gaps in the accessible natural greenspace network, which is a first stage towards developing a greenspace strategy. The areas identified as inadequate in the ANGSt analysis need to be improved and linked to implementation mechanisms, such as identifying opportunities through the Planning system.

### Recommendation

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<sup>7</sup> The Index of Multiple Deprivation dataset is available from the ODPM. See the GI Planning Guide (page 33).

<sup>8</sup> GI Planning Guide, page 33-34

Local Plan datasets could be overlain with the gap analysis, in order to identify opportunities for improvements to greenspace. Improvements can be considered both in terms of quality of existing sites or of quantity (new sites)<sup>9</sup>.

## 2.6 Improving access to greenspace

The ANGSt analysis reveals that the population of the NCA do not all have adequate access to greenspace.

### 2.6.1 Access to local greenspace (within 300 metres of home)

Areas with poor access to local greenspace are identified in section 6.3. These include:

- Whitburn
- Areas of Sunderland
- A central belt in Seaham
- A large area of deficiency around Easington
- Wheatley Hill & Thornley
- Parts of Hartlepool, and the countryside to the west
- Most of rural Sedgfield and around Trimdon
- Areas around Newton Aycliffe, including Heighington, Kirk Merrington and Coundon

### Recommendation

These areas should be targeted for further analysis with the aim of improving access. As many of these areas are rural they may already have good access to greenspace through the rights of way network, these need to be investigated in more detail. Following a more detailed analysis additional countryside sites may need to be developed, or access to existing sites negotiated, in some of these areas.

### 2.6.2 Access to Local Nature Reserves

Access to Local Nature Reserves in the NCA only just meets the ANGSt criteria. However a large proportion of the population do not have easy access to LNRs. Areas where provision is poor include :

- West of Hartlepool
- East of Spennymoor

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<sup>9</sup> This is illustrated in the GI Planning Guide, page 35

- South of Peterlee
- East of Durham City and West of Easington
- North of Houghton-le-Spring.

### **Recommendation**

Work to identify and develop more LNRs, in particular in the central area and in the more densely populated area north of the NCA.

### **2.6.3 Access to larger areas of greenspace**

Access to larger sites (over 500 hectares) is poor in the west of the area. It is important to remember that when the data has been checked the situation may be improved

### **Recommendation**

Consider working to improve access to large sites. Actions could include identifying some of the larger existing sites to the west of the NCA and connecting these to other sites to create larger parcels of accessible greenspace. The railway paths form a good network and in themselves are good green corridors, it may be possible to create links using, or including, these. For example there are several sites close to Chester le Street which, if linked together, could create a site big enough to meet the ANGSt 500 hectare requirement. Another area worth further investigation is between Spennymoor and Durham City. Some of these sites are outside the NCA boundary and may require new partnerships in order to progress developments.

### **2.6.4 Access to woodland**

The Woodland Trust have carried out a similar analysis of access to woodland, working jointly could be of great benefit.

### **Recommendation**

Liaise with the Woodland Trust to ensure coordination, avoid duplication of effort, and where possible to achieve greater access to larger sites.

## 2.7 Improving awareness of greenspace

The difficulties encountered while compiling the greenspace dataset are revealing. There is no central place the public can go to find out exactly where they can go to enjoy open green space. Confident map readers can find the information they need on Ordnance Survey maps, but the majority of the population are not able to do this, and are unlikely to be able to access such information.

### Recommendation

Consider making information on countryside sites available to the public through an interactive or informative website.<sup>10</sup>

The dataset collected through this project could be made available to the public<sup>11</sup>. This could be approached in a number of ways :

#### Interactive website

- The individual typologies could be available on a website, with people encouraged to make comments or corrections if the data is incorrect
- Such an approach would require disclaimers to warn the public that although the sites are on the map they may not actually be accessible
- Similar to Google Earth, users could upload their own geo-referenced photographs, helping to encourage engagement with the sites. This user-friendly approach will encourage others to explore the locations, and will contribute to understanding and accumulation of information about the sites.
- Encouraging user feedback is a good way to update the quality scores and clean up the dataset, it may also reveal sites which have been missed, in particular informal sites used by the public but not recorded by authority
- Local authorities and other partners could be encouraged to have links to the data from their own websites.

An example of this approach can be seen at :

<http://wildweb.london.gov.uk/wildweb/Welcome.do> where the public are asked to report on naturalness and access to build up picture of local use / value of sites.

#### Informative website

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<sup>10</sup> Note that the licence agreements signed for supply of the GIS data was for this audit only, if the data were to be published the origin data contacts should be informed and new licence agreements entered into.

<sup>11</sup> Subject to agreement with the supplying organisations

- The data could be checked and amended where required before being shared with the public
- This approach will require more resources, as sites will need to be visited
- However authorities are more likely to agree to this approach, as they may fear the repercussions of publishing less than 100 percent accurate access data.

It may be possible to combine the two approaches, depending on the level of commitment of the partnership members. Volunteers or Local Access Forums could be tasked with checking out sites and amending the data for example.