

STROUD LANDSCAPE ASSESSMENT

SECTION A

THE SHAPING OF STROUD DISTRICT LANDSCAPE



Supplementary Planning Guidance

November 2000

THE SHAPING OF STROUD DISTRICT LANDSCAPE

INTRODUCTION

Stroud District embraces a diversity of landscape character from the open and exposed plateaux landscapes of the Cotswolds and the sheltered valleys in the scarp face, to the flat expansive landscapes of the Severn Estuary. About half of the District is included in the Cotswold Area of Outstanding Natural Beauty (AONB) a nationally important high quality landscape. The lowland landscapes of the Severn Vale, to the west of the escarpment, are more subtle and diverse and are less well known, but are important at a local level and when viewed from the upland areas.

The dramatic contrasts of the Stroud District landscape are due to many complex interactions, over a long period of time. A unique combination of geology and physical geography, and a rich history of human occupation, all contribute to Stroud District's unmistakable character and identity.

The physical and human factors provide the background to understanding the existing landscape resource, its variety, and its value.



THE SHAPING OF STROUD DISTRICT LANDSCAPE



PHYSICAL INFLUENCES

■ *Geology*

The geology of Stroud District is dominated by rocks of the Jurassic era. The relative porosity and hardness of these rocks have had a significant effect on the character of the landscape influencing land form, the formation of particular soil types and related vegetation cover and building materials.

The influence of geology is marked in the upland area of the Cotswolds which owes its existence to Oolitic Limestone. This rock is yellowish to greyish, hard and porous. The strata of the limestone rock dip gently to the south-east resulting in a raised plateau landscape and dramatic scarp face. The limestone is used extensively for walls and roofs - a typical characteristic of the Cotswolds AONB.

Underlying the limestones are beds of softer sandstone and siltstones with some clay. **These rocks and sediments are exposed on the Cotswolds scarp face and valley sides and it is this interface of the limestone with the underlying clay which marks the transition to the lowland landscapes of the Severn Vale. The clay predominates through the lowland landscape stretching from Gloucester southwards in a broad belt flanking the Cotswolds escarpment and again influences the local building stone which in this area is predominantly brick.**

THE SHAPING OF STROUD DISTRICT LANDSCAPE

Outcrops of Triassic marls form low ridges in the south-western part of the District, with Devonian Old Red Sandstones evident as a broad low ridge stretching south from Sharpness to Berkeley, and beyond to the District boundary. Much-eroded older shales, siltstones and sandstones of the Silurian and Cambrian eras also occur in the southwest of the District, giving rise to an irregular low-lying terrain.

The most recent deposits of marine and river alluvium occur close to the River Severn and the lower reaches of the rivers Frome and Little Avon.

Topography

The District exhibits a wide range of topographical character, but divides clearly into the Cotswolds upland area, and the broad, low lying, gently undulating landscape of the Severn Vale.

The highest part of the Cotswolds plateau occurs in the north-east at just over 280m AOD, while the main body of the upland plateau occurs between 150 - 200m AOD. The upland plateau is characterised by a gently undulating to rolling terrain, dissected by deeply incised, and narrow valleys.

The defining escarpment of the Cotswolds runs more-or-less north-east to south-west, but is much indented and modified by short valleys and coombes.

There are two significant breaches in this dramatic escarpment; one at Stonehouse formed by the River Frome, and one at Dursley and Cam formed by the River Ewelme, a tributary of the River Cam. These valleys tend to be broader than those formed by the smaller streams.

The foot of the escarpment coincides approximately with the 100m contour, with gentle gradients defining the lower footslopes. Much of



THE SHAPING OF STROUD DISTRICT LANDSCAPE

the Severn Vale lowland lies below 50m AOD, with the exception of a few distinctive rounded hillocks and ridges. Small rounded hills are evident near Elmore and Longney, and on the Arlingham peninsular. The ridge of Old Red Sandstone near Berkeley rises to about 40m AOD, while the distinctive whale-back of Triassic marls at Whitcliff Deer Park has its highest point at around 57m AOD. In contrast, *Hydrology and Ecology* extensive, flat, low-lying marshy land and wet pastures flank the River Severn and form a distinctive estuarine landscape.

The main rivers of the District all form tributaries to the River Severn, draining the higher land of the Cotswolds. The River Frome, River Cam and the Little Avon River all flow in a generally westerly or north-westerly direction.

The upper valley sections within the Cotswolds are characteristically steep-sided and deeply incised. In these sections the streams run rapidly and flows are adequate for powering mills; this has been an important factor in the historical and commercial development of the area. The headwaters have a complex, branching pattern with lesser, short tributaries at right angles.

The limestone uplands are generally devoid of surface water, the streams emerging at seeps and springs along the base of the limestone to feed the headwaters.

Many of the lesser streams of the District are short and steep, arising in small valleys and coombes in the escarpment itself, and issuing onto the Severn Vale before joining one of the three main rivers. The River Frome has an unspoilt character in its upper reaches, with an engineered channel in much of its mid-course from Chalford to Stonehouse where it is flanked by the Thames and Severn and the Stroudwater Canals, now the subject of restoration.



THE SHAPING OF STROUD DISTRICT LANDSCAPE

HUMAN INFLUENCES

Stroud District, like most of England, contains a richly historic landscape occupied since the Neolithic period and exploited for its raw materials and fertile soils. Of course, much of the historic land use and settlement pattern has itself been determined or at least influenced by topography, soils, geology and climatic variations, so that the remains or patterns of human activity often reflect the influence of these natural factors.

The Cotswold Hills were first occupied in the Mesolithic period. Small clearings were made in the woodlands and hamlets formed during the Prehistoric period in the sheltered valleys of the scarp, close to water supplies. Visible features from this Prehistoric period include long barrows and hill forts, and although not proven it is likely that the pattern of sinuous lanes connecting the valleys to higher land could also date from this period.

It is not until the Roman period that there is evidence of occupation on the footslopes of the escarpment which includes Roman villas such as at Frocester. A larger area of the Severn Plain is likely to have been exploited for agriculture to supply the neighbouring market towns of Gloucester and Cirencester during this period.

In the Saxon period more villages established on the Severn Plain leaving place names terminating in ham, ton and ley. Domesday records sheep grazing and crop growing on the plain indicating more extensive agriculture.

The Medieval period leaves the greatest mark on the Stroud District landscape today in the form of the settlement pattern and the very important development of the fulling and wool trade starting in the 14th Century and clustering at the foot of the escarpment. Villages prospered and churches were built which can still be seen today.

Over the following centuries increasing population, communication routes and changing agriculture have further influenced the historic pattern of the landscape. The location and form of the built environment has evolved within the landscape to become an integral part of the landscape character of the District. There has, and will continue to be, a large impact on the landscape from national farming trends and the search for efficiencies in agricultural production. Similarly, changing trends in planning policy

THE SHAPING OF STROUD DISTRICT LANDSCAPE

of that landscape.

Woodland, clearly, is an important land cover and habitat type within the District. All measures are required to ensure the protection and positive management of the remaining ancient woodlands and their diverse, dependent wildlife, and to retain landscape character.

Other important habitats within the District include the extensive wetlands of the Severn Estuary landscape, which below the Mean High Water mark, are designated as a RAMSAR site, Special Protection Area and proposed Special Area for Conservation. These estuarine tidal flats and pastures are internationally important for overwintering wildfowl and provide a variety of habitats for other birds, mammals and invertebrates.

Throughout the lowland landscapes small farm ponds occur. These are particularly numerous in the south and southwest part of the District, and are likely to be of special importance for amphibian populations.

The river landscapes have been mentioned under the previous heading, but it should be noted that the rivers and streams throughout the District are generally of high or good quality, supporting a wide variety of plant and invertebrate life including protected species such as Otter and Water Vole, and there are species-rich wetland meadows within the District.

Hedgerows continue to be lost from much of the lowland landscape due to field enlargement for the purpose of streamlining agricultural operations. Continued attrition of this habitat type will seriously weaken the wildlife value of the remaining isolated hedgerows and farm woodlands. Loss of hedgerows and hedgerow trees, and increases in field sizes can also significantly alter the landscape character, both locally, and as seen from more distant viewpoints.

Agriculture and agricultural land use clearly has a very significant impact on the landscape. As part of the assessment, the Ministry of Agriculture, Fisheries and Food were asked to prepare an agricultural issues report.

The following section of this

