

## Views About Management



### **A statement of English Nature's views about the management of Upper Dentdale Cave System Site of Special Scientific Interest (SSSI).**

This statement represents English Nature's views about the management of the SSSI for nature conservation. This statement sets out, in principle, our views on how the site's special conservation interest can be conserved and enhanced. English Nature has a duty to notify the owners and occupiers of the SSSI of its views about the management of the land.

Not all of the management principles will be equally appropriate to all parts of the SSSI. Also, there may be other management activities, additional to our current views, which can be beneficial to the conservation and enhancement of the features of interest.

The management views set out below do not constitute consent for any operation. English Nature's written consent is still required before carrying out any operation likely to damage the features of special interest (see your SSSI notification papers for a list of these operations). English Nature welcomes consultation with owners, occupiers and users of the SSSI to ensure that the management of this site conserves and enhances the features of interest, and to ensure that all necessary prior consents are obtained.

### **Management Principles**

Caves represent a very important scientific resource for a number of reasons. Caves themselves provide important information on environment, climate and landscape development over the last several million years. Caves often contain sediments deposited by underground rivers that are also important in the study of environment and climate change in the recent geological past. Some caves contain animal bones where the animals once used the caves for shelter. On the surface, these bones and sediments would not have been preserved but would have been destroyed by weathering and erosion. Bones and artefacts from our early ancestors are also preserved in caves. Cave formations, such as stalactites and stalagmites, are important for a range of studies, including scientific dating, and are also of great aesthetic value. In addition, caves are an important habitat for bats and invertebrates.

Caves are sensitive systems which often suffer significant pressure from human activities, both above and below ground. It is important to manage the overlying land and catchment in a manner which takes account of potential consequences on the caves. Groundwater pollution from fertiliser, spreading of agricultural or industrial waste on land and dumping of rubbish or other waste in swallow holes or cavities are serious problems in some caves. Activities, such as pumping groundwater or

diverting water courses, can affect the groundwater regime through cave systems and have serious effects on the dynamics of the system.

Blocking of cave entrances can also have serious repercussions below ground in altering air flow with consequent effects on underground climate. For example, the growth of stalactites and stalagmites is dependent on water composition, air temperature and humidity. These are easily perturbed so that growth is altered or ceases. Activities that may vary the amount of light available within the cave should also be considered carefully. Quarrying can result in partial or complete destruction of caves, or can disrupt their underground or surface catchment.

Direct pressures underground can arise from irresponsible caving. Problems associated with caving include inadvertent physical damage to cave features such as cave formations (flowstone, stalactites and stalagmites) and cave sediments, destruction of cave sediment deposits through irresponsible cave exploration, pollution and removal of cave formations or other minerals by collectors. The National Caving Association's guidelines on responsible caving are supported by English Nature and provide important information on caving and conservation.

Positive management of caves may require good access management which is often best undertaken by responsible local caving clubs and associations. Gating can be a solution to controlling access to sensitive caves, with access maintained by responsible caving groups.

The disturbance or removal of any geological material from caves can be damaging to the features that make this cave special. A precautionary approach should be adopted before removing or allowing any material to be removed from caves or before permitting any underground activities, such as digging of cave sediments, which could cause permanent loss or damage.