## SSSI – SOME CONCERNS

## INTRODUCTION

This work was prompted by a derogatory statement on the state of one Site of Special Scientific Interest (SSSI). This provoked the question 'What is the country wide picture on caves and mines covered by SSSIs?'.

The SSSI status is intended to provide a legally based protection for features of special scientific interest. The responsible statutory bodies enforcing the acts are different in each country; Nature England (NE), Natural Scot (NS) and Natural Resources Wales (NRW). (The situation in Northern Ireland is not covered in this paper.) These bodies publish a citation and a list of operations likely to damage the features for each SSSI. The citations covering caves and mines have been reviewed and the results are presented below.

One of the drivers in the 1990s for the designation of cave or mine related SSSIs was the Joint Nature Conservation Committee (JNCC). The relationship between the outputs of that committee and subsequent similar work and the list of citations covering caves and mines is also presented below.

One of the consequences of creating SSSIs is the question of condition monitoring. It has been tacitly acknowledged by them that as the statutory bodies did not have the capability to monitor the caves and mines, then cavers would do so on their behalf. The relationship between the monitoring programs and the list of citations has also been reviewed and is presented below.

The legal basis for the protection provided by the law is briefly touched on.

The result of this work is discussed and some recommendations made.

# CITATIONS

All of the SSSI citations for the three countries have been searched using a computer program for the words cave, mine (and also including fissure, ogof, pot hole and uamh) and a total of 276 citations were identified. My thanks go to Ari Cooper-Davis and Ben Wright for undertaking this work. Ben's work revealed that there are some 143 citations were found within England, 32 within Scotland and 101 within Wales relating to a cave or mine or sets of them.

These citations were manually scanned to check how 'features of special scientific interest' (hereinafter referred to as 'features') were specified. This resulted in being able to sub-classify the features as the morphology of passages, sediments, formations and other, plus a number that specify the cave or mine as being inhabited by bats and other fauna. The numbers are:

Geology					Habitat				
Passage	Sediments	Formations	Other		Bat	Bird	Insect	Plant	Other
42	49	34	73		99	5	6	24	26

It should be noted that one citation can have more than one feature. What at first glance is striking is that the total sum of passage, sediments and formations is only 125 out of 276 citations including cave or mine. This only rises to 198 when including other features which are mostly related to minerology in mines. It is also noteworthy that 70 other citations only mention cave or mine due to their being a bat habitation.

Worse still, 17 citations have no indication of any feature of the cave or mine. One notable example of the lack detail in specifying the feature of interest in respect of cave, mine etc is from Burrington Combe which states "a number of caves are intersected by the gorge"; the gorge being the specified as "a fluvial karst feature". So it might appear that the caves are not part of the SSSI designation. (Though the citation does include the statement "Several caves are included within the site, some of which support populations of bats".) Ingleborough is another example which states: "More than 50kms of cave passage have been mapped underground, interesting not only for their scale and diversity, but also for the evidence they provide on the evolution of the Pennine landscape since the beginning of the Ice Age". So it would appear that the passages are the only feature and not the sediments or formations.

Ari's work revealed that there are over 4000 caves and mines listed in the various online cave registries whose entrances lie on land designed by the 276 SSSIs.

### SELECTION CRITERIA FOR SSSI

One of the drivers for the designation of cave or mine related SSSIs was the JNCC. The JNCC web site as at 2019 listed some 50 caves (or sets of caves) as being of significance. Of those 4 appear to have not been covered by the SSSI designation either at all or only partially.

One major product from this JNCC work was the creation of the Geological Conservation Review (GCR) process. This resulted in the production of one volume in the GCR entitled "Karst & Caves of Great Britain" (1997) by A.C. Waltham, M.J. Simms, A.J. Farrant & H.S. Goldie. This lists some 87 caves (or sets of caves). It appears that possibly up to 50% of the caves included in that list are not included in the 276 SSSIs. (Though some may be included under different names.)

It is also striking that in the late 1990s, it was recognised that there was a lack of clarity in what the features were and three contracts were awarded leading to the production in 2002 of:

Inventory of scientifically significant features in cave SSSI's (Southern England), Lands and Resources Programme. Commissioned Report CR/02/034, British Geological Survey, 2002;

Location of Special Interest Features in cave SSSIs in England Sites in the Peak District Area (including Castleton). Commissioned Report EIT 31 -02-14, English Nature, 2002; and

Caves in Northern England, Inventory of Special Interest Features in S.S.S.I.s, Tony Waltham, Harry Long and Dave Brook, 2002.

NS also awarded a contract around the same time for a base line report on caves in the Ben More Assynt SSSI. I have not found reference to any similar work being carried out for caves in Wales. Needless to say, these inventory documents generally bear little relation to the albeit poorly specified features in the citations. A simple example is Lamb Lear for which the citation only indicates interest in its sediments. The inventory document covering Lamb Leer includes a reference to two locations relating to sediments plus a further five locations relating to formations which do not appear to be covered by the citation.

# MONITORING OF SSSIS

There appears to be an expectation by NE that some monitoring of SSSIs will be carried out by cavers. NS have paid for one follow up monitoring report. There is no publicly available information

on NRW interactions. The monitoring reported does relate to the four contracted reports noted above.

The range of monitoring of caves and mines recorded for Derbyshire, Mendip, the Dales and in Scotland does not reflect the range of SSSIs. A simple example is the monitoring in Scotland which only covers one of the 32 Scottish SSSIs.

As an aside, it was as a consequence of the follow up report to NS that NS made the declaration of "partially destroyed" in respect of the Ben Moore Assynt SSSI. It is understood that this declaration is constrained by the small range of assessed condition statements of SSSIs which NS use, compared to the larger range used by NE.

# THE LAW

The Wildlife and Countryside Act of 1981 as amended is a difficult piece of legislation to read as it has been substantially amended as well as split in its application between the three countries of England, Scotland and Wales. There are three noteworthy points in relation to this topic:

- A feature of special scientific interest must have been included in the notification. The publicly available citation is not the notification.
- Only an owner or occupier can commit a criminal act of carrying out an operation likely to damage a feature. So the list is of no significance in deterring damage by other persons.
- Whilst it is a criminal act if anyone else "... destroys or damages ... feature ... by reason of which land is of special interest...", the provision is caveated by the need to show it was done "intentionally or recklessly".

# DISCUSSION

It is clear that there is a mismatch between caves and mines identified for inclusions as SSSIs and those which have been so designated. It is also clear that there is a wide variation in both the level of detail specifying the features in the citations for the cave or mine SSSIs and what is identified for the monitoring program.

Whilst it is clear that the citation must be based on the detail in the notification, the warning appended to the NRW citations about referring to the notification in legal disputes, does imply there could be significant variation between the detail publicly declared and that included in the notification. The level of detail in the citations appears in the majority of cases to be sufficiently vague to enable a defendant to claim that the feature was not so protected and in any case, did not do it *"intentionally or recklessly"*. As the lack of clarity is focused on what are *'features of special scientific interest'*, it is felt that this topic is of more concern to and better sits within the remit of BCRA than BCA.

There are potentially three levels of detail in specifying these features:

- The whole cave or mine;
- General features (such as passage, sediments or formations);
- Precise detail (such as formation at point 'A', sediment at Point 'B').

Whilst the top level would potentially impose considerable restrictions on persons entering the vast number of caves or mines within the SSSI, the most detailed level would not only require substantial

amount of work to produce such an inventory but would also not catch features identified in the future as being of value.

Discreet attempts to view some actual notifications have not been successful. Overt attempts to view the notifications (such as using the Freedom of Information Act) have not been pursued as it was felt this might create an unfortunate atmosphere for further work with the statutory bodies.

It is suggested that it is more appropriate for BCA to take forward engagement with the statutory bodies and also the implementation of monitoring programs which will need to involve the regional caving councils.

As a spin off from this work, a paper has been presented to the British Caving Association's Conservation and Access Working Group on Monitoring of Caves and Mines. The declared purpose of the paper was to start a nationwide debate on recording the conservation of caves and the production of some guidelines to aide that work.

The detailed research which has gone into producing this document (including the 276 citations) can be obtained from the author and will be deposited in the British Caving Library.

## CONCLUSIONS

There is a need to resolve what caves and mines should be included in the set of SSSIs and also what the features of special scientific interest should be within this set of SSSIs. There is also a need to resolve the monitoring program to match the set of SSSIs and features of special scientific interest.

BCRA appears ideally placed to undertake this work and advise BCA of its considered opinion on features of interest in caves and mines.

There is then a need for BCA to engage with the statutory bodies to place the coverage of features on a firm legal footing to minimise the risk of being unable to legally protect such features whilst maximising the ability of cavers and mine explorers to explore and extend caves and mines.

### RECOMMENDATIONS

BCRA set up a program of work to:

- identify which caves and mines are worthy of being identified as SSSIs;
- identify the level of detail that the features should specify;
- identify such features in the favoured SSSIs;
- specify the needs of a program to monitor\_such features.

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