

EDITORIAL MINES OF AVON

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Industrial archaeologists with an interest in the history of mining in the Bristol Region will have noticed with sadness the death of Dr J W Gough in May 1976. Dr Gough was appointed assistant lecturer in history at the University of Bristol in the 1920s, and applied himself to the research which resulted in his superb study, **The Mines of Mendip**, first published in 1930. Although Dr Gough returned to Oxford in 1931, and moved into other fields of research (interestingly enough, however, his later studies of the political philosophy of John Locke were linked to his Mendip interests because Locke lived at Wrington in the seventeenth century and was associated with the mining adventurers), he was still prepared to lecture on Mendip mining when industrial archaeologists rediscovered the subject in the 1960s. His book remains indispensable to students of the subject, and is an elegant example of the combination of physical with documentary evidence. For not only was Dr Gough the first scholar to go systematically through the Waldegrave family papers, giving many insights into local mining conditions, but he also tramped about Mendip doing first-hand field research. He was still able, in the late 1920s, to talk with old workers in the lead enterprises, so that he pioneered the use of oral evidence in industrial history. His curiosity was aroused by such practices as dowsing, the claims of which he examined carefully. And he examined the ruinous sites of the lead workers for evidence of the size, function, and importance of the various business interests drawn to Mendip in the nineteenth century in an effort to exploit the waste material of the earlier miners.

Significant new evidence has come to light in recent years about Mendip mining, and the time is approaching when it will be necessary to consider a revision of some aspects of Dr Gough's account. But his death serves to remind us of the great debt we owe him, and provides us with an opportunity to reflect on the need for more studies such as **The Mines of Mendip**. Whereas Dr Gough dealt almost exclusively with lead mining, there is a need for a similarly thorough study of calamine mining and its links with the Bristol brass industry, and other mining enterprises have so far fared even worse. The iron mining industry of Iron Acton and Frampton Cotterell is virtually unrecorded, while the Bath stone mining industry, the Yate Celestine mining industry, and the mining of fullers earth in the Southern Cotswolds, remain as subjects still requiring the most basic research. Even more pertinently, the industrial history of coal-mining in the coalfield of Bristol and North Somerset is a subject in urgent need of systematic research. Some of the groundwork has been covered by Mat Southway in his articles published in BIAS Journals 4 and 5, (and in the current number) and the book by Down and Warrington on **The History of the Somerset Coalfield** has assembled much useful industrial archaeological material. But a great deal remains to be done in order to combine the physical with the documentary material in a comprehensive study of this important industry. In particular, following Dr Gough's example, it is desirable that the oral evidence of the many

surviving coal miners and their families should be put on record before it is too late. There are methodological problems about using oral evidence in historical research, but it clearly has a value even though it needs to be interpreted with great caution. If it is to be recorded, however, it must be done soon, because the experience of old coal mining communities in this part of Britain is a rapidly dwindling asset now that the last operational coal mine has closed down. Local newspapers seem to have a standard heading - "Old Miner Dies" - which appears with depressing frequency to record a death in Radstock or Writhlington, Kingswood or Coalpit Heath, Nailsea or Bedminster. Every appearance represents the loss of one more potentially valuable source of historical evidence.

Mining, whether it be for coal or stone or for metallic deposits, is an exploitative process aimed at removing something from the ground without replacing it. At its best, it is unlikely to embellish the landscape with objects of beauty, although some of the gaunt engine houses of the Cornish metal mines do achieve this, and at its worst mining can wreak terrible havoc with an environment, disfiguring it with ugly waste heaps and polluting it with fumes from the primary processing such as that associated with many lead mining sites. Nevertheless, from the point of view of the industrial archaeologist, with whom aesthetic considerations, although important, are not supreme, the mining industries are full of interest. In the first place, there is the vital task of identifying old mining sites, involving the sort of map-work and careful fieldwork which industrial archaeologists are well equipped to carry out. Despite the harsh impact of a working mine on its immediate neighbourhood, it is surprising how quickly an abandoned mine reverts to a condition approximating to that of nature. Waste heaps become overgrown; surface buildings, often intended only as temporary structures, decay swiftly; and the shafts are filled in or capped and disappear. The search to identify such sites is thus not an easy one. But it is an essential basis for recording the extent and size of a mining industry, and occasionally it can be a highly practical matter also. The Lofthouse colliery disaster in Yorkshire in 1973 revealed the need for mine operators possessing accurate records of the extent of previous enterprises, and although no tragedy of this magnitude has occurred in Avon County there has been such extensive development of both housing and industry in the heart of the old Kingswood coalfield that accidents with forgotten mine shafts have become familiar to residents of the area. The trouble usually occurs when foundations are laid over the site of a mine, but occasionally the rotting of timber beams used to cap a shaft many decades ago has caused embarrassing subsidence and loss of property. In other cases, as with the stone mines under Combe Down to the south of Bath, the presence of the workings is well known but their extent is not recorded and they have presented a serious threat to the development of office blocks in the area. So the recording is desirable on both scholarly and utilitarian grounds.

Secondly, the investigation of mining sites can provide valuable information about the processes conducted at and around the head of the shaft: the method of winding, the use of animal or steam power, the provision for washing or crushing or smelting the minerals, and the method of disposing of the waste material. Generally speaking, metal mines are a more rewarding source for this kind of investigation than coal mines, because coal requires relatively simple processing once it has been won from the mine. The lead and calamine workings of Mendip, on the southern fringe of Avon County, have a few tantalizing fragments of smelting furnaces and flues, buddling pits, and on Smitham Hill, a solitary chimney, to tax the imagination of modern students of metal mining. Even more vestigial remains occur in conjunction with the mining operations in the carboniferous limestone hills north of Wrington and on Durdham Downs, but all are worth examination and recording.

Thirdly, the transport systems deriving from mining activities are a fertile topic for enquiry by industrial archaeologists. Most of the metal mining activities of the county pre-date the development of the modern transport system and must have relied largely on pack horses as a means of transit between the Mendip mines and the valley of the Avon. Coalmining, however, was closely associated with improvements in transport. Several turnpike roads were constructed specifically to serve coal mines in North Somerset, with coal proprietors such as Jacob Mogg being active amongst the trustees. The purpose of the Somersetshire Coal Canal was made explicit in its title: it was intended to link the expanding coal mines of the Camerton and Radstock Valleys with the Kennet and Avon Canal at Dundas Aqueduct, and for many years proved to be the most remunerative part of the local canal network. Readers of this journal will be well aware of the industrial archaeological interest of the Coal Canal, with its intriguing lock system at Combe Hay and the mystery of the missing caisson lock. The upper part of the canal was served by an intricate pattern of short tramways making links with the local collieries, which have also been the subject of fieldwork. The coming of the railways to the Bristol Region took the needs of the coal mining interests fully into account, and I K Brunel's work on the Box Tunnel helped to develop the rich source of Bath stone which has been since mined in its vicinity. The earlier stone mines around Bath had required special transport facilities in order to convey the blocks of stone raised from the mines down the steep hill to the River Avon. Ralph Allen's tramway of the 1730s was the first of these, with its wooden track running past Prior Park to the river at Dolemead.

There is still work of industrial archaeological research to be done on all these three aspects of mining in Avon County. There is also a need to consider the question of conservation before the physical remains deteriorate beyond the scope of meaningful preservation. We have on previous occasions regretted the loss of the opportunity to preserve the pit-head at Writhlington in conjunction with a stretch of Somerset & Dorset Railway track between the colliery and Radstock: the chance has now gone, so that all surface evidence of the Avon Coalfield has disappeared except for a few spoil heaps and a scatter of ruinous buildings. The few surviving remains of the Mendip lead industry are receiving attention, and interest is being shown in some of the Bath stone mine sites, although it is difficult to see what can be preserved of these. For the most part, the mining industries of the county do not offer much material worth serious conservation efforts, and they should be left to revert to natural conditions as the processes of erosion work on them.

Perhaps, however, there is one part of the physical heritage of mining which is likely to be neglected but which is worth consideration for conservation. The communities of miners who worked on Mendip in conditions of appalling poverty and in isolation from other people have all disappeared, so that our conjectures about their way of life must remain highly speculative, and we are unlikely to learn much about them from archaeological investigation. But the village of Shipham preserves something of the shape and atmosphere of a mining village, and is worth keeping like this. Even more striking, because they have been more recently occupied by working miners, are the sturdy terraces of artisan housing in places like Peasedown St John, Radstock and Kingswood. Some of this housing is doubtless sub-standard, so that formal efforts at preservation would not be justified. But much of it is capable of being brought up to modern standards and can continue to provide excellent accommodation for many years to come. It would be well worth the attention of county planners and conservationists to consider the best means of maintaining this stock of housing, and thus to preserve something of the distinctive character of mining communities amongst the new development in these areas. In this way a viable link can be made, not only with the industries of the past but with the people who worked in them, and thus an interest in industrial archaeology can contribute positively to the quality of life of areas which are otherwise in danger of becoming rather featureless dormitory suburbs for Bristol and Bath.