Conservation Bulletin, Issue 15, October 1991

(NB: page numbers are those of the original publication)

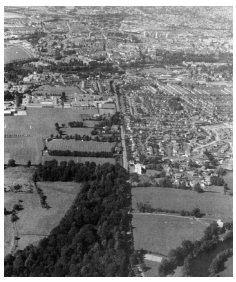
CHESTER – GREEN BELT CLARIFIED

Debates about the Green Belt commonly focus on the country's metropolitan areas, and particularly on Greater London. It is unusual for the Green Belt's role in protecting historic towns to come to the fore, but development plan proposals for the expansion of Chester have brought this aspect into prominence.

An area of Green Belt around Chester has been accepted in principle since the early 1960s, and the inner boundaries were drawn in 1983. The Local Plan for Chester, considered at public inquiry in November 1988, proposed a strategy based on increased rates of growth for the city. Three hundred hectares of land were to be released from the Green Belt, allowing for substantial housing and business park development. The plan envisaged a new bypass financed by this development as 'planning gain' to help ease traffic problems in the City.

The inspector reporting on the local plan inquiry expressed concern that the strategy would be harmful to the character of the city and accepted that Chester's capacity to absorb development without damage to its environment was a valid consideration. He did not find that 'exceptional circumstances' had been demonstrated for the release of land in the Green Belt, as required by Government policy. In any event, he considered that the release of land was on a strategic scale and this was a matter for the review of the county structure plan. In the meantime, he recommended that the land allocations should be trimmed back.

The local plan was put on hold in July 1990 by the then Secretary of State, Chris Patten, pending consideration of the strategy in the context of the new Structure Plan for Cheshire. Coordination of strategy between county and district meant that the general policies set out in the Structure Plan, as they related to Chester, reflected the land-use allocations of the local plan. The Structure Plan envisaged Chester as playing a major role in attracting investment to the region which would benefit the less prosperous parts of the county. It proposed therefore that the Green Belt boundaries round Chester should be reviewed. An Examination in Public on the Structure Plan, presided over by an independent panel, was held in October 1990.



Chester: the historic city from the south with Green Belt in the foreground (N Higham)

The Secretary of State published his proposed modifications to the Structure Plan in July 1991. He confirmed that the balance between growth and conservation in and around Chester was a matter of national, as well as local, importance. He considered that the protection of the historic city was one of the principal purposes of the Green Belt, referring to Chester's setting as a whole 'and its special character, particularly that of its central core'. He affirmed the importance of the Green Belt in providing 'continuing and effective control over the city's environment and character'.

The Secretary of State concluded that strategic release of Green Belt land was inappropriate on the grounds that:

Chester was already under pressure from traffic and the proposals for expansion of the city were not justified by improvements in present standards

while the City could promote inward investment in the region, particularly through tourism, 'such a flagship role should not encourage the over-development of this historic city in its green setting'

the release of green-field sites for executive housing in Cheshire would run counter to government policy for urban regeneration in the regional centres of Liverpool and Manchester.

The Secretary of State accepted the view that Chester might be reaching the limits of its growth, if its historic character was to be maintained.

The enquiry panel had recommended that a limited amount of land should be released from the Green Belt, and that a study should be carried out by independent consultants on how further releases would affect the character of Chester. While the Secretary of State agreed that a longer term look at the safe limits of growth would be helpful, he disagreed that modifications should be made to release some areas of Green Belt. Such releases 'would be seen as an encouragement to further release of Green Belt sites… On present information, and applying the principle of caution, no sufficiently strong case has been made to justify the release of land from the Green Belt.' The Secretary of State therefore proposed that the Structure Plan be modified to reduce the allocation of housing and employment land for Chester in order to avoid any need for incursion into it.

The Secretary of State's proposed modifications are out to consultation at the time of writing, and, as a participant at the Examination in Public, English Heritage will be responding. The case raises a number of interesting general questions. To what extent can historic towns expand without damage to the historic core from additional traffic pressure? Can historic centres retain their identity and role as the focus of the town, if activities are decentralised? To what extent is it important to protect the definition or 'edge' of the settlement in preserving its identity? And what value should be attached to a green setting and to views to and from settlements? These are issues for all historic towns.

For historic towns with Green Belts, and there are perhaps half a dozen like Chester which are of national and international importance, it is essential that clear guidance is given, and for this reason the Secretary of State's reassertion of Government policy is particularly important. Green Belt policy, originally formulated over 35 years ago and reissued in 1988, implies that there is a definable optimum limit to the extent of permissible settlement. Moreover, Green Belts are to be regarded as permanent. In the case of Chester, the Panel concluded that the boundaries of the Green Belt were not out of date, or so tightly drawn

as to be inappropriate to Green Belt objectives, and stressed that tightness is a desirable characteristic in an historic town context. It follows that such towns should plan for minimum growth, consistent with maintaining prosperity (which is, in any case, essential to maintaining the historic fabric) to reach a sustainable equilibrium. In Chester, and by implication other outstanding historic towns, the emphasis has been put firmly on restricting growth and channelling any further development into improvements of quality rather than those of quantity.

KATHERINE FLETCHER

EDITORIAL

LISTED BUILDING CONSENT: HOW EFFECTIVE IS OUR ROLE?

In earlier editorials, emerging data about English Heritage grant schemes were presented: my facts and opinions were subsequently used – and occasionally misused – in national and other publications. They helped to provoke greater scrutiny of English Heritage activities and policies. This is welcome: we wish to share what we can, particularly as sound data are scarce and guesswork rife in the conservation world.

I hope what follows will also interest, inform, and stimulate debate. It concerns one of our key, but lesser known, statutory functions in relation to listed buildings, ie our role in secular listed building consent procedures, and, in particular, what happens in call-in cases.

For the purposes of this article, my statistics (derived from our own records) exclude London. In the capital, we have special powers which do not exist elsewhere, so data are not comparable and procedures are different. I am therefore writing on the basis of the 92% of listed buildings which lie outside the former GLC area.

If a building is listed, the owner is required to apply to the local planning authority (LPA) for consent to extend, alter, or demolish any part of it. The procedures followed by the LPA are complicated (and set out in some detail in DoE Circular 8/87). At various stages in the process, English Heritage has the role of advising local planning authorities and the Secretary of State for the Environment on the most important of such applications. We thus have the chance to offer our professional and technical expertise to the LPA and listed building owner, at the point where it is potentially most useful and of greatest benefit to the building.

However, we need to show that such intervention is worthwhile, since it is an extra step in a consent process which applicants find a time-consuming restriction on private property rights. We also need to measure the effectiveness of the time devoted to this task, the number of cases coming forward, and the outcome.

In more detail, outside London English Heritage is potentially involved at both stages of a two-tier advisory system. At the first level – notifications – we have the opportunity to offer advice to the LPA on specific cases which they *notify* to us when they first receive them, so that our views can be taken into consideration by their committee when they determine applications. It is mandatory to notify us of applications affecting Grade I and II* buildings. Some authorities also notify us of applications involving full or partial demolition of Grade II buildings. Although they may *refuse* any listed building consent applications, authorities, however, may not grant consent for any works to a Grade I or II* building, or substantial demolition of a Grade II building, without first referring it to the Secretary of State for him to consider whether to call in the application. This introduces the second level of the system – referrals. At this stage, the Secretary of State will ask English Heritage for advice on whether or not he should intervene to determine the case himself. Intervention means that he will *call in* the case to be decided by him, usually after a public inquiry. If he does not, the decision stays with the LPA, but, whether we are advising the Secretary of State or the

LPA, our function is only that of advisor: the decision is taken by the LPA or the Secretary of State, as appropriate.

Table 1 shows the general picture in numerical terms. Over the last seven years, when the total number of listed buildings outside London grew by over 30% (mainly as a result of the list resurvey now coming to an end), the number of LBC cases, both notifications and referrals, handled by English Heritage has increased by 50%, reflecting the enormous surge in LPA notifications during the 'boom' years, now slowing but still growing. Referrals from the Secretary of State, having peaked in 1986/87, dropped back sharply and are now running 24% below the 1984/85 level.

I believe that the pattern and outcome of referrals reflects the growing effectiveness of the work put in with local authority officers, owners, applicants, their agents and architects, and the national amenity societies to ensure that applications do not do irreversible damage to listed buildings. We seek involvement at an early stage before formal LBC application is made, as well as later when the statutory 'clock' is running. We have yet to find a satisfactory way of measuring this positive input, but it represents the majority of the work done by our statutory teams on listed building consents.

The total number of cases which we handle each year is a small percentage of the total number of listed buildings, ranging from less than 1% to under 1.5% during the period. Almost as low in recent years is the percentage of cases referred to us by the Secretary of State which result in English Heritage advice to call in (see Table 2). Why is this so, and why is the percentage declining? I suggest that the negotiation and debate which go on at the earlier stages of the process are helping to ensure that only a small and reducing number of cases contain proposals so damaging to the listed building that in our view they must be opposed as far as the last, expensive, and time-consuming process of a public inquiry. When seen in this light, a recommendation to call in an application can be regarded as a failure of the system because at some stage the process has foundered, and the proposals presented will involve either substantial or total demolition, or alteration which will seriously damage or destroy the special character of the listed building.

There is some evidence to confirm this view. We are most closely involved with Grade I and II* listed buildings (6% of the national total), where LPAs are required to notify English Heritage of proposals at application stage: this gives us an opportunity to negotiate to avert damaging proposals and for the LPA to take our views into consideration. In fact, all but two or three cases a year recommended by us for call in are applications for demolition (full or partial) of Grade II buildings where English Heritage, unlike the statutory amenity societies, has usually had no previous opportunity to offer advice.

Since proposals for Grade II buildings are not required to be notified to English Heritage, the first time that we see most proposals for their demolition is at referral stage when we can only offer advice to the DoE on intervention. At this stage, as we are acting in our capacity as advisors to the Secretary of State, we cannot negotiate with either the applicant or the authority. This means that our advice to the Secretary of State is impartial, but this silent period undoubtedly adds to the frustration which many people feel with the workings of the system. If they could speak with us direct, as they do at a comparable stage of scheduled monument consent procedures, this might be overcome.

Once the Department has considered our advice and announced whether or not it proposes to call in an application, we are again free to negotiate. Table 2 shows that a substantial number of called-in cases are then withdrawn by the applicant before the inquiry takes place. In terms of the listed building's survival, such withdrawal is the removal of an imminent threat and can reflect a successful negotiation with English Heritage to achieve a better solution or an understanding that an inadequate case for change or demolition has been made. But that better solution at such a late stage is achieved at the cost of significant expenditure of time, proliferation of procedural paperwork, and consequent delays and frustration for everybody.

Available statistics on the outcome of public inquiries need to be interpreted with caution. They do, however, seem to suggest that the strength of the conservation argument for refusal of consent in the case of applications which do ultimately go to inquiry is now being reflected in the outcome. This also reinforces the conclusion that 'negotiable' cases are increasingly being dealt with at an earlier stage.

The DoE's proposed revision of Circular 8/87 – which forms the basis of all these procedures– into a Planning Policy Guidance Note is expected to go out to consultation with all interested bodies later this year. This may provide the opportunity for some fine tuning of the system. I hope that all readers of the *Bulletin* who are consulted by DoE will take the opportunity to respond positively with their own proposals for any improvements which will streamline the system in the interests of both conservation and the owners of listed buildings.

JENNIFER PAGE

Chief Executive

Table 1 Listed Building Consent statistics (outside London)

Year from April–March	**84/85**	**85/86**	**86/87**	**87/88**	**88/89**	**89/90**	**90/91**
Number of List entries	333079	367395	395377	405386	420310	435000	438230
LBC notifications, LPAs to EH	558	1113	2110	3026	1954	2441	2763
LBC referrals from DoE to EH	2648	3294	3607	2454	2289	2033	2030

Table 2 Call-in recommendations and Public Inquiries

Call-in recommended by EH	47	63	60	42	37	26	25
Call-in agreed by DoE	41	53	46	36	30	23	20
Withdrawn after call-in agreed	4	25	15	19	20	13	8
LBC refused after PI	19	9	21	9.5*	8	7	1
LBC granted after PI	18	19	10	7.5*	2	2	0
Awaiting Pl result	0	0	0	0	0	1	11

LBC Listed Building Consent
LPA Local Planning Authorities
DoE Department of Environment
PI Public Inquiry
*Case where part-demolition and part-retention recommended as result of PI

RECENT LEGAL CASES

WINCHESTER PALACE: £75,000 FINE

On 11 June 1991, the Inner London Crown Court fined the owners of part of the scheduled site of Winchester Palace in Southwark, south London, £75,000 for excavating their basement without scheduled monument consent. The offence came to light in May 1989, when a passerby noticed material of archaeological interest being carried out to a skip. Further investigations revealed that J O Sims Ltd, a fruit and vegetable company, had been excavating the basement of their warehouse which stood on part of the site of Winchester Palace, the London townhouse of the Bishops of Winchester. In fact, the medieval palace overlay the earlier remains of a Roman settlement which had stood at the southern end of the bridge over the Thames. The unauthorised excavations were thought

to have resulted in the removal of Roman and medieval layers. Parts of Roman tessellated pavements may have been lost.
English Heritage referred the matter to the Crown Prosecution Service. After investigation by the police, a charge was brought, under section 2 of the Ancient Monuments and Archaeological Areas Act 1979, that the scheduled monument had been damaged by the carrying out of works without scheduled monument consent. At the trial in the Crown Court, the defendant company pleaded guilty to the charge, but said that it had not realised that the basement of their premises lay within the scheduled area. Any contravention of the legislation had, it argued, therefore been negligent rather than deliberate.
Judge Prendergast, in pronouncing sentence, said the monument was of national significance and that, as a result of the unauthorised works, the archaeological record had been lost for all time. He accepted evidence which showed that the company had attended a meeting some months before the offence, where the company had been shown a map of the scheduled area; they should therefore have been aware that their basement was within the protected area. He ordered the company to pay a fine of £75,000 and costs of £1000.

Winchester Walk: the north basement looking east, after excavation, the depth of material removed from below the floor level can be seen on the right

This is believed to be the highest fine yet recorded for a breach of the legislation protecting ancient monuments. The previous highest was the fine of £15,000 in respect of Legbourne Priory *(Conserv Bull*, **11**, 14). The powers of the Crown Court to fine those guilty of breaches under section 2 of the 1979 Act are unlimited. The Winchester Palace fine shows that the Crown Court is prepared to use its powers to ensure that scheduled monuments are protected and that those who, either deliberately or carelessly, damage monuments without consent cannot expect to profit from their transgressions or come off lightly.

REVESBY ABBEY

Detail at foot of north basement spine wall, showing a Roman tessellated pavement on a bed of white mortar, truncated by the excavation of the floor level

In the first half of 1988, English Heritage carried out urgent works to protect the Grade I listed Revesby Abbey from further deterioration. Revesby Abbey, Lincolnshire, is one of the major works of William Burn and was built in a Jacobean style around 1845. For a considerable period it had been unoccupied and decaying. It was part of a settled estate; the owners wished to demolish the building and keep the site within the estate. In 1977 the estate had applied unsuccessfully for the demolition of the Abbey.
After attempts over a long period to persuade and negotiate had come to nothing, the Secretary of State authorised English Heritage to carry out a schedule of urgent works to keep the house wind and weatherproof, to arrest plant growth, and to treat and remove the dry rot which was threatening to take control. Interior plaster features were protected during the works which were completed by April 1988.
This was the first occasion on which the Secretary of State had authorised English Heritage to undertake urgent works under the power now contained in section 54 of the Planning (Listed Buildings and Conservation Areas) Act 1990. Inside Greater London, English Heritage may undertake such works without approval by the Secretary of State, but outside London we currently require the Secretary of State’s authorisation.

The works, carried out by contractors instructed by English Heritage, cost some £120,000. Under section 55 of the Act, the cost of urgent works carried out by local authorities or the Secretary of State may be recovered from the owner. A statutory recovery notice was accordingly sent to the tenant for life of the Revesby estate. The tenant for life exercised the statutory right to appeal under section 55(4) of the 1990 Act. After an informal hearing by a government inspector in July 1990, the Secretary of State announced in May 1991 that he had refused the appeal and confirmed the recovery notice in full.

This informal hearing highlighted a perhaps little known provision of the 1990 Act: this is section 87 (previously section 275(2) of the Town and Country Planning Act 1971). The section reads: 'The classes of works specified in Part II of Schedule 3 to the Settled Land Act 1925 (which specifies improvements which may be paid for out of capital money, subject to provisions under which repayment out of income may be required to be made) shall include works specified by the Secretary of State as being required for properly maintaining a listed building which is settled land within the meaning of that Act.' The effect of this is that the tenant for life of a settled estate may apply to the Secretary of State for a certificate which can then enable repairs to a listed building to be paid for, or financed out of, capital monies of the estate (rather than the yearly revenue with which a tenant for life must usually be content). This provision is important, because it opens up the possibility of utilising the capital of the estate to preserve the fabric of a listed building which a tenant for life might otherwise be unable to afford.

Shortly after the urgent works were carried out, Revesby Abbey was sold to a developer who has since obtained planning permission to convert it into flats. It is hoped that the scheme will now proceed and enable this important building to be brought back into beneficial use.

CHARLES BIRD

CONSERVATION AND LOCAL GOVERNMENT

The widespread consultation undertaken by the Department of the Environment in April this year gave English Heritage, along with other bodies, the opportunity to comment on proposals for reform of local government structure. Our full response is available, but the main points are summarised here.

Local authorities at all levels play a key role in conservation works. While broad policy may be set centrally, and national agencies such as ourselves can promote funding, expertise, and guidance in relation to major problems and the most important sites, buildings, and areas, effective implementation of policies and local commitment to conservation depend critically on local government. At a strategic level, we look to local authorities to develop plans which contain comprehensive conservation policies. In our day-to-day contacts, we are concerned to uphold standards of care exercised by local authorities in handling listed building and conservation area consent applications, and planning applications affecting ancient monuments, historic buildings, or historic areas. Local authorities are the custodians of a significant proportion of the country's important monuments and buildings, as well as partners with us in deploying grants for the repair of buildings and the enhancement of conservation areas; to which we estimate that they contribute some £12m a year.

Most county councils, and some district councils, now have their own archaeological officers who will play an increasingly important role in implementing PPG 16 on archaeology and planning. These are backed up in most instances by a Sites and Monuments Record which is an important part of the national database for the Monument Protection Programme. Most counties also maintain a conservation team, as do many district councils. Based on currently available statistics, we estimate the overall input by

local authorities to general environmental enhancement, including conservation, to be in the region of £147m per annum (see the table).

Effective conservation requires specialist skills, and such skills are not in unlimited supply. Nor is it reasonable to expect all small authorities to afford expert staff, and relatively few can be expected to employ the full range of expertise required to deal effectively with all the responsibilities from archaeology through to area enhancement which maybe involved at a local level. It is therefore important, whatever structure is ultimately proposed, that local units should be large enough to be able to build on the expertise which has already been developed for conservation work, and to command sufficient resources and specialist skills to cover the range of work adequately. Joint working between authorities – the solution to some of the services affected by the abolition of the metropolitan county councils in the last round of local government reforms – has proved difficult to sustain effectively in relation to conservation work. Regional and central government agencies are too remote from the day-to-day decisions most affecting the built environment.

As local authorities are aware, English Heritage as a national organisation has some difficulty in maintaining close links with all 365 district and borough authorities, especially if an authority shows no clear signs of commitment to conserving or improving the historic environment in its area. A smaller number of larger authorities, unitary or not, might ease this problem and allow specialist resources to be used both efficiently and more effectively.

In our response to the consultation paper, therefore, we expressed no preference for any particular structure of local government. We have said that we would wish to be able to give more detailed evidence when proposals for change are considered in any particular area, but that reform must make room for the provision of sufficient resources and expert personnel to allow local planning authorities to discharge their responsibilities for the historic environment, both now and in the future.

MIKE PEARCE

‘General environmental enhancement including conservation’ in England

1987–8 estimates

No	Population millions	Employees	Expenditure £m		
			Revenue	Capital	Total
Non-metropolitan county councils	29.4	539	12.0	3.1	15.1
Non-metropolitan districts	(29.4)	695	20.1	21.3	41.4
London boroughs	6.8	307	6.3	5.4	11.7
Metropolitan districts	11.2	417	14.2	25.5	39.7
England	47.4	1958	52.6	55.3	107.9

1990–91 estimates

39 *Non-metropolitan county councils*	30.0	661	18.5	6.5	25.0
296 *Non-metropolitan districts*	(30.0)	788	32.5	23.2	55.7
33 *London boroughs*	6.8	284	8.5	3.9	12.4
36 *Metropolitan districts*	11.1	527	22.8	31.0	53.8
404 *England*	47.9	2260	82.2	64.7	147.0

Source: CIPFA, with allowance for non-responding authorities at average for each type of authority

STEELMAKING AT DERWENTCOTE

Derwentcote steel furnace before consolidation, viewed from the south: the buttressed furnace with the cone is in the centre; smaller ancillary buildings lie on either side (B Knight)

Derwentcote, which lies on the south bank of the river Derwent, about 10 miles south-west of Newcastle upon Tyne, consists of two parts: a water-powered forge lying close to the river and, on higher ground to the south, the steel furnace which is still virtually intact. The forge was built *c* 1718 and used the finery/chafery process to convert cast iron into malleable bar (wrought) iron; in the 1780s, it was one of the first forges to adopt Cort's puddling and rolling process to undertake the same conversion. It also worked up steel from the furnace. The steel furnace was probably built in the 1720s (certainly before 1748) and used the cementation process to produce 'blister' steel from high-grade imported Swedish bar iron (the bar iron produced in the adjacent forge was not suitable, since it contained sulphur and phosphorus as impurities). In the nineteenth century (perhaps in the 1850s), a crucible melting shop was added, for melting the 'blister' steel into cast steel. The forge appears to have abandoned bar iron manufacture shortly afterwards, concentrating on forging and rolling the cast steel. The cementation furnace probably closed in the 1870s, but the forge struggled on until around 1880.

The importance of the site was recognised by archaeologists in the 1960s, by which time the steel furnace and its ancillary buildings were derelict and falling into ruin, while little survived (at least above ground) of the forge. Derwentcote is recognised as the only authentic complete cementation furnace in Britain and represents a steelmaking technology that existed from about 1600 until the last 'heat' was carried out in Sheffield in 1951. The core areas of the furnace and forge were taken into care by English Heritage in 1985.

Conservation of the furnace site commenced in 1987, beginning with a programme of clearance, detailed recording of all the standing structures (by rectified photography, computer photogrammetry, and written description), and excavation of the interiors of the buildings and of the surrounding areas. This has been followed by consolidation of the fabric and re-roofing of the ancillary buildings. The site has now been opened to the public. Throughout the programme, close attention has been paid to the study of slags, vitrified materials, and furnace linings, which are recognised as a major component of the technological information surviving on the site.

IRON AND STEEL

Of the three types of iron or iron alloy mentioned above, malleable (wrought) iron was the traditional form of unalloyed iron, cast iron is an alloy of iron and carbon containing between 3 and 4% carbon, and steel is an iron-carbon alloy containing up to 1.5% carbon. Although early steels contained no alloying elements other than carbon, modern steels are alloyed with other elements (eg stainless steel also contains chromium). Simple iron-carbon steels are very versatile materials, because they have a wide range of physical properties. In particular, the hardness of the metal increases with increasing carbon content – ie a 0.8% carbon steel is harder than a 0.3% carbon steel. Steel also has the important characteristic that its hardness can be greatly increased by quenching, ie rapid

cooling. Good quality steels have always commanded a price premium, in part owing to the high cost of production.

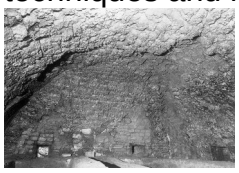
IRON PRODUCTION

The smelting technology used until the medieval period – the 'direct process' – produced malleable iron by direct reduction from the iron ore. During the medieval period, the limited amounts of steel production were in great demand. At this time, however, the 'indirect process' of iron production (the blast furnace technology) was introduced. The blast furnace produced molten cast iron and was able to extract a higher percentage of metal from the ore than the earlier direct method. This cast iron was brittle when solid and had to be converted to malleable wrought iron by the finery/chafery process. Early blast furnaces used charcoal as the fuel, but further developments in the post-medieval period included the successful use of coke as a fuel by Abraham Darby in 1709 at Coalbrookdale.

STEELMAKING

Steel has a carbon content intermediate between (wrought) iron and cast iron. It could therefore be manufactured either by removing some carbon from cast iron or by carburisation – adding carbon to wrought iron – a process which was carried out in the cementation furnace at Derwentcote. In their heyday, cementation furnaces were the major producers of steel in Britain and, for a time, produced the highest quality steel. The furnace is characterised by its conical shape and comprised three elements: at the base, a hearth ran the length of the building; this fed flames and hot gases up into a vaulted chamber below the cone; and the cone acted as a chimney.

The carburisation process followed at Derwentcote is known in some detail. Seven tons of iron bars were packed into a sandstone chest with a carburising mixture, usually charcoal breeze, although various recipes were patented. The chests were sealed by a clay/sand mixture, again with particular ingredients. The chests lay in the vaulted reverberatory chamber and the furnace was fuelled by coal and fired for five to seven days. During this firing, the temperature inside the chests reached nearly 1100℃ and carbon from the carburising mixture readily diffused into the iron. The aim was to produce a homogeneous steel. After firing, the chests were emptied of the remaining breeze and the bars extracted. The steel bars were known as 'Blister steel', because their surfaces had a blistered appearance. It was a skilled, but lucrative, process and the highest standards of techniques and materials were required.

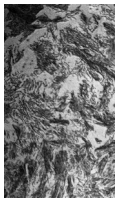


Inside the vaulted reverberatory chamber: in the centre is the hearth and on either side are the sandstone chests which were packed with iron bars and carburising mixture; the walls and the roof are heavily vitrified; the maximum height from chest top to roof is about lm (B Knight)

THE WASTE PRODUCTS

Eight different types of manufacturing waste, listed and briefly described below, were identified in the material recovered by excavation from Derwentcote. Samples of each have been analysed using two or more of the following techniques: metallurgical microscopy (reflected light microscopy), scanning electron microscopy (SEM) with an attached energy dispersive X-ray analysis system, X-ray diffraction (XRD), and X-ray fluorescence (XRF). The results show that three of the eight slag types can definitely be

associated with the cementation process, and a further two are probably also byproducts of the process.
Flat cakes of friable ‘fritted’ sand up to 35mm thick can be interpreted as fragments of the sand layer that was packed on the top of the filled chests to seal and maintain a carbon-rich atmosphere within them. Contemporary records refer to the fired sealing material as ‘crozzle’.
Black, agglomerated, irregularly shaped lumps of slag, containing some coal, up to 100mm long and between 50 and 100mm thick, had a composition similar to the refractory brick, but enhanced in iron. This would suggest that it derived from a hearth area, resulting from high temperature chemical reactions between the fuel and the hearth brick. There was no evidence to confirm that it came from the hearth of the cementation furnace, and the increased iron content suggests that it could have formed in a hearth in the forge.
Refractory brick, some of it vitrified, was used to line the inside of the reverberatory furnace.
A reddish/black cindery slag which contained inclusions of coal or possibly charcoal occurred as plates with a single, flat surface up to 40mm thick. It is therefore possible that this slag formed in the hearth of the cementation furnace.
Circular discs of dense refractory material with a diameter of 80–150mm and a thickness of 20–30mm, the upper and basal surfaces of which were flat and vitrified, were identified as having formed the lids for sealing the pots used in crucible steel production. In this process, the steel (usually blister steel) was melted to produce a better quality product. There is documentary evidence for the production of crucible steel at Derwentcote.



A photomicrograph of a polished section of a Swedish stamped carburised bar showing ferrite (pure iron, white) and the dark etching pearlite (the iron-carbon eutectoid, with a carbon content of 0.8%); magnification x 70

A small quantity of slag, typical of that produced by charcoal blast furnaces which smelted iron ore to produce cast iron, was recovered. There is no documentary evidence for an early blast furnace at Derwentcote, although there were several such furnaces in the Derwent area.
Lengths (up to 200mm) of bar iron, some of it carburised, were identified as the original wrought iron – some of it bearing Swedish makers’ stamps. The microstructure of one example is shown in the photograph (left).
The slag with the widest distribution on the site had a similar morphology to the blast furnace slag, but had a much higher iron oxide content (about 50% compared with 5% in the blast furnace slag). It therefore did not derive from the blast furnace process, but as yet the process which produced it has not been identified.

CONCLUSIONS

The analyses of the slags, residues, and other waste products recovered from excavation at Derwentcote contribute substantially to the understanding of the site. First, they provide technical information available from no other source, an important consideration for an industrial monument. Second, identification of residues associated with the cementation process coupled with their further study, in particular the fragments of bar iron, will complement historical and archaeological research. Third, slags and residues derived from ironworking processes other than cementation were identified. There is now physical as well as documentary evidence that crucible steel was produced on the site. The identification of charcoal blast furnace slag raises the possibility of an early blast furnace

on or near the site, although there is no other evidence for one. Further research, survey, and excavation may resolve this problem. It is possible that the blast furnace slag and the unidentified slag had been brought onto the site as hardcore and so do not relate to metallurgical processes carried out on the site. Finally, the information gained from these studies has contributed to the presentation of the site to the public. These waste products demonstrate the materials used in the processes.

The cementation process was used for over 300 years and was an essential part of the Industrial Revolution. On the continent, the cementation and crucible steel processes were known as '*Les méthodes anglaises*'. English Heritage is now displaying this aspect of our heritage alongside the better known remains of medieval and earlier monuments.

GERRY McDONNELL and DAVID CRANSTONE

CHURCH GRANTS

Readers may well recall that last year English Heritage was forced to declare a moratorium on church grant applications in August because of shortage of funds. The Head of Conservation Group has recently written to Archdeacons and other interested parties to advise them that this year we are likely to cease offering church grants in most of our regions very soon.

We do not, however, intend to impose another moratorium; last year's caused considerable confusion to applicants and delayed the progressing of urgent repairs, without having a significant effect on the programming of grant offers this year.

We are therefore advising new applicants for grants, and those whose applications are still in the pipeline, that we will continue to process their applications to the point at which a decision can be taken as to whether or not grant should be offered. Where an offer of grant is to be made, the applicant will receive a letter setting out those works which we are prepared to grant-aid, our cost estimate for those works, and our grant offer in cash and percentage terms. A formal grant offer will then be made after the beginning of the new financial year.

This procedure should allow churches to get on with fundraising and with the preparation of specifications and seeking of tenders, secure in the knowledge that English Heritage funding to a certain level will be forthcoming. It will not, of course, be possible to make any payments of grant until the formal offer has been made, and we are advising all applicants that, because of the continuing shortage of resources, we will be scrutinising the urgency of works and the resources of churches very carefully. We will be less able to offer grant increases (although we will attempt to give priority to increases in respect of urgent, unforeseen repairs on programmes already running) and we will be operating the grant-conditions, particularly those in respect of the timing of commencement of works following the grant offer, much more stringently than we have done in the past.

It has to be recognised that, if demand for church grants continues to run at its present level, the budget for next year will also prove inadequate. In conjunction with the Church of England and other denominations, we are already carrying out a reassessment of the need for state-aid to churches based on the survey carried out before the establishment of the current scheme. We shall be looking in particular at the accuracy of the original survey as a predictor of need, the impact of the church grant scheme on the level of redundancies, and the amount of funding required to meet the current and future need for grant by churches.

JANE SHARMAN

BLUE PLAQUES

On the left: the Great Portland Street home and workshop of David Edward Hughes, the Inventor of the microphone; on the right: the houses in Garbutt Place, Marylebone, where Octavia Hill started her housing reform work; below: the respective plaques

The publication of a new edition of *The blue plaque guide** has produced a good deal of publicity about these familiar features of the London scene. This in turn has stimulated a number of enquiries from local authorities about the operation of the English Heritage scheme, with a view to its adoption elsewhere. Although the first blue plaques were erected as long ago as the 1860s, by the Society of Arts, they were even then confined to London. The work was subsequently taken over by the LCC in 1901 and continued by the GLC. English Heritage assumed responsibility for blue plaques in 1986, when it inherited a number of functions from the GLC under the Local Government Act of 1985.

TYPES OF PLAQUE

One of the most frequent queries received concerns the type of plaque used. Over the years, English Heritage and its predecessors have found that circular, glazed ceramic plaques, which are set into the surface of the building, are by far the most satisfactory aesthetically and in practical terms. Although relatively expensive to make and fix and needing careful positioning, they are extremely durable and require virtually no maintenance. The plaques erected by the Society of Arts were of a basically similar material and several have lasted, still perfectly legible, for more than 100 years. Their disadvantage is that the inscription has to be kept relatively short, although this in turn helps legibility from a distance.

From time to time other materials, including bronze and enamelled steel, have been used, usually because a long inscription is necessary or because a ceramic plaque is not suitable for a particular building. All have been found to have drawbacks in terms of durability, maintenance, or even theft. It must be said, however, that other materials have apparently been used successfully elsewhere, but by now the blue ceramic plaque has become a well-recognised trade mark of the London scheme.

The first Society of Arts plaques were blue, but other colours, particularly brown, were used from time to time before blue was adopted as standard after the Second World War. Over the years, it had been found that the use of a blue base colour with white lettering enhances legibility and blends well with most of the varied types of buildings in London. It is certainly possible to make ceramic plaques in other colours and people wishing to erect private plaques are encouraged to use alternatives to distinguish them from the official plaques.

CRITERIA FOR ERECTION

Formal criteria for the erection of plaques do not appear to have been adopted until 1954, but a number of general principles evolved during the long history of the scheme, some of them dating back to the practice of the Society of Arts.

One of these is that the plaques are intended to mark buildings or places which have interesting associations and are not meant to be substitutes for statues or memorials to famous people. For a brief period, this principle was diluted when plaques were erected on rebuilt premises which bore no resemblance to the original building. With a view to checking this practice, one of the criteria adopted in 1954 was that plaques would not be erected on the sites of former houses occupied by famous persons, and this has remained a firm rule.

Another long-established criterion is the '20-year rule', namely that in order to be considered for a blue plaque a person must have been dead for 20 years, or have been born over 100 years ago. This is to ensure that, as far as it is possible to judge, a person's fame will be long-lasting and not transitory. It remained the general rule, with a few exceptions, until 1966, when ten years was substituted. Within three years, however, this was found to be a mistake and 20 years 'without exception' was readopted. The amendment that the centenary of birth could be substituted in the case of long-lived persons was adopted in 1971.

These are firm rules, which English Heritage endorsed when it took over the scheme in 1986, and no suggestions which breach them will be considered. The other criteria, however, are less easy to apply. They are that in order to be considered for a blue plaque a person must be regarded as eminent by a majority of members of his or her own profession or calling; or have made some important positive contribution to human welfare or happiness; or have had such an exceptional and outstanding personality that his or her name would immediately be recognised by the well-informed passerby; or should deserve recognition. The last of these is designed to cover persons who may have been responsible for some significant achievement but who through historical accident have escaped recognition.

The use of such criteria is clearly a matter of judgement. That is why all suggestions which satisfy the 20-year rule and for which there is a suitable building are submitted to English Heritage's London Advisory Committee. To assist it in its task, the Committee has appointed a working group of some of its own members and others which meets from time to time to evaluate all suggestions and submit a short-list of candidates for the Committee's approval. Once the short-list has been endorsed by the Committee, each suggestion on it is investigated in depth and a full report presented to the Committee.

NOMINATIONS

All suggestions for plaques come from the general public and, as the scheme is so well known, there is certainly no shortage of them. English Heritage has taken the decision to erect about 12 plaques a year, both because this is a manageable workload and in order to maintain the cachet of the scheme; however, on average about 50 to 60 suggestions for blue plaques are received each year. Between a quarter and a third of these are rejected, because they do not satisfy the 20-year rule or because there is no suitable building surviving. This still leaves far more suggestions than can be accepted, and difficult decisions to reject about two out of three have to be taken. Of course, such decisions are not made on a strictly numerical basis and, if there is a group of particularly worthy suggestions in any one year, many more than 12 may be approved. For this reason, there is at present a considerable backlog of short-listed suggestions.

In making their decisions, the working party and the Committee bear certain factors in mind. One of these is that the achievements of an individual are as important as popular fame, so consideration will always be given to the erection of plaques to men and women who have made significant contributions to human welfare but whose names are not well known. A recent example is the plaque which was erected on the former home and workshop of David Edward Hughes, the inventor of the microphone. Another is the forthcoming plaque to be erected at the Kensington home of Rosalind Franklin, whose

researches were important in helping to unravel the mystery of the structure of DNA. Attempts are also made to strike a balance between professions, so that writers, artists, and politicians do not dominate, as has perhaps been the tendency in the past.
In theory, it would be possible to erect plaques on several residences of a famous person who moved around a great deal (like Charles Dickens, although in fact most of his homes have been demolished), but, because of the pressure of the number of suggestions, English Heritage rations plaques to one per person. It is, therefore, important to ensure that the most appropriate location in terms of its significance in a person's life and work is chosen, bearing in mind that the purpose of a plaque is to mark the association between a person and a building.
It is usually the residence of a famous person which is marked by a plaque, but very occasionally his or her place of work is chosen instead. In the case of Octavia Hill, for instance, all her London homes have been demolished, and so it was decided to erect a plaque on the group of houses in St Marylebone where she began her housing reform work.
Whether a building is listed is not a material consideration in the erection of a plaque. A street of ordinary houses can be much enhanced by the presence of a blue plaque on one of them, and most of the nearly 600 blue plaques in London are not on historic buildings. Indeed, one of the satisfying features of the scheme is that it shows how great work can often be accomplished in quite ordinary places.
Much of the recent publicity about blue plaques has been on the lighthearted side. There is nothing wrong with that; the scheme is a popular one and clearly gives much pleasure. It should be borne in mind, however, that the work itself has to be taken seriously and that the successful operation of a plaque scheme requires a great deal of care, thought, and diligent research.

VICTOR BELCHER

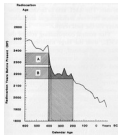
**The blue plaque guide is* published by the Journeyman Press and costs £6.50; it is available from bookshops or by post from English Heritage Postal Sales, PO Box 229, Northampton NN6 9RY.

RADIOCARBON DATING

The announcement of the first radiocarbon dates by Willard F Libby in New York in 1949 was a sensation and introduced a new era for archaeology. For the first time, it seemed possible to provide physically determined absolute dates that were independent of archaeological assumptions.

GENERAL PRINCIPLES

The principle of radiocarbon dating is ingenious and deceptively simple. High-energy radiation from outer space interacts with nitrogen in the earth's upper atmosphere, generating small amounts of radioactive carbon – ^{14}C – which, on becoming incorporated into carbon dioxide, is then rapidly and uniformly dispersed about the earth. The organic compounds of all living matter contain carbon, and, since radiocarbon behaves chemically in the same way as ordinary carbon (^{12}C), it too becomes absorbed. The proportion of ^{14}C to ^{12}C in living organisms is known and is assumed to have remained constant over time. At death, the absorption of fresh radiocarbon ceases, whilst the radiocarbon already present in the organic tissue begins to decay at a known rate. A date is obtained by measuring the proportion of surviving radiocarbon to ordinary carbon and thus the time elapsed since the death of the sampled organism.



Part of the radiocarbon calibration curve, illustrating the process of calibration: two uncalibrated radiocarbon dates, A and B, are shown. A lies between 2280 and 2380 radiocarbon years before present (BP) and B lies between 2160 and 2260 BP. The upper and lower limits of each can be assigned to calendar ages by drawing a line horizontally to the calibration curve and then vertically, from this intercept, to the calendar year axis. The calendar year range which results from the calibration of date A has a span of only 22 years, whereas that from date B has a span of 185 years, despite the two uncalibrated ranges being identical. This extreme, but real case illustrates how profoundly calibration has caused us to reconsider the results of radiocarbon dating.

Once this basic principle was established and the excitement of the 'radiocarbon revolution' settled down, it soon became obvious that something was wrong. Accurately dated sequences for historic timbers, based on measurements of their annual growth rates, were found to be at variance with results from radiocarbon dating, which seemed to diverge substantially from the real (calendrical) ages. This divergence starts at about 500 BC and, moving backwards in time, reaches a maximum underestimate of some 800 years at 4000 BC, remaining at this level until at least 7000 BC. From 500 BC to AD 1300 the radiocarbon age tends to overestimate the calendar age by up to 150 years. These trends suggest that the production of ^{14}C in the atmosphere has not in fact been constant, as had been assumed, but has varied over time – perhaps because of magnetic field effects or post-glacial climatic changes.

CALIBRATION

Although archaeologists now had to accommodate the need to calibrate their radiocarbon dates against the tree-ring record, the perceived usefulness and objectivity of radiocarbon dating enabled it to survive this apparent setback. The revised dating framework, gave rise to what has been labelled the 'second radiocarbon revolution', and called, for instance, for a dramatic reappraisal of the relationship between western Europe and the Middle and Near East during the Neolithic and Bronze Age.

Calibration against the tree-ring record is by no means a straightforward process, however, and has given rise to much confusion. It is achieved by means of a graph, the 'calibration curve', which relates radiocarbon ages to true, calendar ages. A radiocarbon date is located on the graph, and the true calendar age which relates to it is read off. Radiocarbon dates are presented as a range within which the true age has a known probability of lying. Thus, the true age which is read off from the calibration curve is, in fact, a range of calendar ages. A particular difficulty arises from the superimposition on the main deviation of the calibration curve of a succession of shorter term fluctuations or 'wiggles' which are thought to be associated with sunspot activity. The presence of these kinks and the relative 'steepness' or 'flatness' of the curve at any given period mean that a radiocarbon date cannot necessarily be simply converted into a single calendar date. A radiocarbon date could indeed coincide with the calibration curve at two or even three places with the result that the true date might fall into any one of three equivalent calendar ranges. Further, where the calibration curve is relatively 'flat', as in the British Iron Age and in the immediate postglacial period, several centuries may have passed, during which the radiocarbon ages remain apparently almost constant. This means that a radiocarbon date, which may consist of a narrow range of possible ages, may be converted by calibration into a very wide range of possible calendar ages. Such a range may be too wide to give more than the broadest indication of true age, making the dating of little practical use.

After 40 years, the full complexity of the method is now apparent and has generated a vast international literature and research base. Recent developments give cause for both optimism and renewed caution. Of particular importance has been the emergence of new and internationally accepted high-precision calibration curves, which represent the outcome of years of dedicated and meticulous research by dendrochronologists and dating laboratories. Calibration now extends back to 7200 BC and work is continuing to press back yet further in time. Such curves allow radiocarbon dates to be matched as accurately as possible with their equivalent calendar dates and are also now much in demand from astronomers and physicists, who use them to investigate past changes in the earth's atmosphere and its interaction with cosmic rays. The standard radiocarbon technique can rarely give the true age of an object to within a range of less than 150 years. A combination of radiocarbon and dendrochronology can do much better, however, even in situations where each is imprecise. This combined technique, called 'wiggle matching', is performed by dating six or more samples of wood which, although of unknown age, can be related precisely to each other by counting the annual growth rings between them. The combined radiocarbon dates and growth ring counts allow a short section of the calibration curve to be built up: this can be compared with the whole curve to give a very precise match. An accuracy of better than ten years can often be achieved in this way.

DATING REFINEMENTS

Further cause for optimism has been the development of radiocarbon dating by accelerator mass spectrometry (AMS). This third 'revolution' has introduced the possibility of dating very much smaller samples than was possible using the conventional methods of gas proportional counting and liquid scintillation counting. The latter techniques rely on the measurement of the radiation emitted by the sample; AMS instead allows the counting of actual atoms, or a proportion of them. Sample size required for this process may be as much as 1000x smaller than for the conventional methods. Such a reduction opens the possibility of dating tiny individual items – a single grape pip for instance – as well as small pieces of precious artefacts, such as the Turin Shroud. It has even been possible to obtain realistic dates for traces of blood on flint tools.

Despite the obvious advantages of AMS dating, the problems of calibration remain. Also, in dealing with such minute quantities of carbon, the effects of contamination by carbon of a different age become acute, necessitating complex pretreatment processes. When dating a sample from an archaeological site, particular care has also to be taken in ensuring that the sample is contemporary with the event needing to be dated. Small items in particular, for instance fragments of charcoal, may have travelled far in both time and space before reaching their final resting places. Such considerations also cast justifiable suspicion on dates previously obtained by gathering multiple charcoal fragments to 'bulk up' a sample to the required weight. The dating of soils and peat encounter similar problems.

Scottish Universities Research and Reactor Centre, radiocarbon dating laboratory

Whilst the archaeologist shares the important responsibilities of ensuring that the sample comes from a relevant context and is professionally selected and collected, the dating laboratory alone must be relied upon to apply the most rigorous scientific procedure to the highest possible standards. There are now some 130 active radiocarbon laboratories around the world. Recently, 50 of these took part in a very detailed study which revealed, rather alarmingly, that there can be significant variation in the reliability of results between laboratories. No fewer than 23 of the 38 laboratories compared in the final stage of the study failed to meet all the basic criteria identified as necessary for an adequate

performance in the production of dates. Whilst many laboratories' data may be in excellent agreement, such results show that significant divergences can exist. The radiocarbon dating community now accepts that quality control requires very strict monitoring indeed, and procedures towards this end are already in hand.

ANCIENT MONUMENTS LABORATORY

Although much detail has been avoided here, it will be very apparent that the principles, practice, and interpretation of the method are highly complex. One of the main functions of the Ancient Monuments Laboratory (AML) is to help archaeologists obtain the best possible service in the radiocarbon field for projects funded by English Heritage. Although the AML does not undertake the dating procedure itself, it is responsible for allocating appropriate samples to suitable laboratories and for providing advice to all parties involved. Some 60% of all English archaeological radiocarbon samples pass through the AML – about 250 dates per year. We have current dating arrangements with the Radiocarbon Accelerator Unit of the Research Laboratory for Archaeology and the History of Art at the University of Oxford, the Queen's University, Belfast, and the Scottish Universities Research and Reactor Centre at East Kilbride, Glasgow. Each of these laboratories has a very high reputation, and their differing specialities allow the demands of varying dating requirements to be met. The AML acts to facilitate close liaison between archaeologist and laboratory for the best result.

This central coordinating role of the AML, with the large number of dates that are processed, provides an invaluable overview of current dating practice and demands, enabling us to monitor standards and to develop appropriate dating guidelines. The Laboratory now operates a computerised database of current projects and has built up an archive of previous results which will lead to the publication of comprehensive lists of dates over the next two years. It is also possible to encourage and collaborate in research projects, where the results can be quickly fed back into the Laboratory's own practice. An example is the forthcoming investigation of peat chemistry in the dating programme for the North-West Wetlands Project.

The AML can also provide both archaeomagnetic and tree-ring dates. The latter, in particular, can offer very precise dating for the historic period and later prehistory. However, and despite having to struggle somewhat to retain its appeal, radiocarbon dating remains crucial to archaeology and will continue to be a formidable asset in the ordering of events over the last 40,000 years.

ANDREW DAVID and DAVID JORDAN

FRAMING OPINIONS UPDATE

Since the start of the campaign in April 1991, Framing Opinions activity has expanded greatly, reaching consumers, councillors, designers, specifiers, and boardroom directors through unprecedented media access and support. National and local press coverage and radio interest continue to keep the issue in the public eye and we estimate that more than 35 million people have been presented with our conservation case. Notable commentary includes editorial praise in the *Telegraph, The Times,* and the *Independent,* and constructive interest from BBC Radio Four's 'Punters' programme and from BBC Radio Two's Jimmy Young Show.

Our commonsense message of education and awareness, rather than restriction and regulation in tackling insensitive alterations and replacement of components, has struck a chord with a wide cross-section of the community. Colleagues in Historic Scotland, the Department of the Environment (Northern Ireland), and the States of Guernsey are actively pursuing their own responses to the initiative; professional associations and national amenity and civic societies have all offered support or resources for the cause. Furthermore, commercial trade associations, product manufacturers, and service companies in the building, DIY/home improvement, and related industries have come forward, with either the aim of aligning their activities and resources with the campaign's objectives or of better understanding and taking account of our conservation viewpoint. Some companies have sought our advice on product development in order to cater better for conservation needs. Others have invested heavily in marketing existing (benign) services linked to our campaign's mission. Still others have offered to promote Framing Opinions by sponsoring conferences and exhibitions – all to improve and enhance information exchange and general awareness.

The Georgian Group has published two guides to windows and doors as its contribution to the campaign and SPAB hopes to complete publication of its technical pamphlet on window repair by the end of the year. Elsewhere, the homeowner/consumer monthlies, the *Old House journal* and *Traditional Homes*, are running articles on windows and doors, with the latter also producing special technical information leaflets aligned with our work.

On the left: original details preserved – two of only a handful of dwellings remain anything like their original condition out of 156 properties on the estate; timber sash windows with moulded glazing bars sit recessed under curved red brick gauged arches and on top of painted stone cills. On the right: character eroded – the dwelling on the right of this semi-detached pair has concrete pebble dash rendering; the windows are of the top hung, casement type flush mounted on the facade over a thin timber cill; glazing bars are internal and of a thin section offering no shadow lines to the elevation; the left-hand dwelling has replacement windows recessed in the original openings, but the sections are narrower than the originals and the flat glazing bars are internal.

For those who did not attend the campaign launch at the RIBA HQ in April, English Heritage has produced a *Reading list for homeowners* which is available from the Framing Opinions Office, English Heritage, Room 527, Keysign House, 429 Oxford Street, London W1R 2HD, price £2.50 including postage.

INFORMATION SHARING

We have been gathering data from local authority experience in development control of replacement windows, enabling us to start work on a schedule of prosecutions, enforcement action, and inquiry/court case results. We are in discussions with the woodworking and building industries about the feasibility of producing a national directory of craftsmen and companies willing and able to repair or overhaul traditional windows. We are talking to the Steel Window Association about possible joint activities to promote better maintenance and upgrading of historic metal sections.

With the British Plastics Federation, the Aluminium Window Association, and the Glass and Glazing Federation, we are actively discussing ways of informing their member companies about our concerns and working with them to investigate product development and responsible, informed marketing.

BROMLEY REVISITED

As many readers noticed, we published a contradictory photograph on page iv of the Supplement to the June issue of *Conservation Bulletin:* we apologise for the confusion. Here, we have republished the same photograph to illustrate *unsuitable* window replacements and contrasted it with a view of a neighbouring pair of dwellings, where original features remain intact.

The Alexandra Cottage Estate Conservation Area was designated in 1984 by the London Borough of Bromley to preserve and enhance the character of this remarkable charitable housing scheme of the 1860s, built by the Metropolitan Association for the Improvement of Dwellings for the Industrial Classes. The 156 properties in 78 pairs of early semi-detached houses have a singularly modern look from a distance. But at close range, in the tight cul-de-sacs and lanes, the small-scale details and original features clearly demonstrate the true age and special interest of the development.

The local planning authority responded to local residents' requests to seek tighter development control powers to stem the tide of inappropriate home improvements. Local surveys and plans were put before public meetings with a view to gaining an Article 4 Direction. By then, however, the mood had changed amongst the majority of local people and consultations gained a strong negative response, which resulted in the Department of the Environment refusing confirmation of the Direction.

Consequently, preservation and enhancement plans were abandoned and the results are plain to see. Out of 156 dwellings on the estate, only a handful have all their external original features intact. Residents have invested heavily in home 'improvements', but lack of guidance on sources of benign products and services has naturally forced them to respond to market convenience.

Whether the next generation of purchasers reacts differently and restores the missing features will depend on general awareness, local pride, and possible incentives, as much as the longevity of currently installed components and their effect on future market values.

EXHIBITIONS AND CONFERENCES

Three major international exhibitions and conferences are planned for the winter and spring, dealing with the theme of cost-effective conservation (repair, maintenance, and sensitive upgrading) of timber windows and doors. English Heritage is exhibiting at Interbuild '91 at the NEC in Birmingham from 24–9 November 1991 and is running a joint conference on the last day there with the Building Research Establishment. Then, the Framing Opinions exhibition will appear at Restorex at London's Alexandra Palace from 25–7 February 1992 and a repeat of the EH/BRE conference is to take place on the third day. The joint conference finishes its tour at BRE's headquarters in Watford on 9 April as part of the campaign's grand finale. Details of these events are available from the Building Research Establishment: Mrs P Rowley, Conference Manager, BRE, Garston, Watford WD2 7JR.

A separate event, but closely related to the Framing Opinions theme, is being organised by the Georgian Group, called 'The future of the English town'. This is to be held as a conference at the Art Workers Guild in London on 14 January 1992 to coincide with an exhibition of the same name which runs from 13 January to 9 February at the ICA in The Mall.

Other confirmed Framing Opinions events include a conference and exhibition in Winchester organised by the Association of Conservation Officers, Southern Region, for 29 February. The event will focus on the historical development of window detailing and repair techniques for timber, metal, and leaded lights. Information is available from Katherine Blackwood, ACO South, c/o East Hampshire District Council Planning Department, Development Services Division, Penns Place, Petersfield, Hants GU31 4EX.

Finally, English Heritage is to join forces with Carrick District Council in Cornwall to run another Framing Opinions conference in Newquay on 17 March 1992. Details from Carrick Council: Dr Alysun Cooper, Planning Department, Carrick District Council, Carrick House, Pydar Street, Truro, Cornwall TR1 1EB.

With the next issue of English Heritage's *Remnants* publication, which is sent to schools, we are challenging teachers to make their own local response to Framing Opinions and to seek the help of planning departments and branches of professional institutes in presenting the problems and solutions to young people everywhere.

We intend to challenge other groups to respond to the campaign. Estate agents and building society and bank managers are now a high priority, since most damaging 'improvement' work takes place when properties change hands. We will also be talking to the various Chief Officer groups in local authorities and to the relevant authority associations.

We are also evaluating the best way to deliver complex professional technical and economic guidance to all those who require advice: we have collected numerous local authority and civic society technical leaflets and policy' guidelines in order to produce a schedule, so that others might discover and use them as a basis for their own publications.

Definitive capital and maintenance costings are being examined to help in the debate about repair versus replacement. We are also collating information on energy conservation, maintenance practice, and on the pros and cons of substitute materials.

All this activity takes considerable time for our modest team, but we are greatly encouraged by the favourable response to our efforts so far and by the resources volunteered from all corners of the community to help increase it.

JOHN FIDLER

'IMPROVEMENTS' IN HISTORIC AREAS

When conservation areas are designated, local planning authorities have a duty to formulate and publish schemes for their preservation and enhancement to ensure that local character is strengthened rather than diminished by change, and to secure the proper preservation and, where necessary, reinstatement of those key elements which reinforce local distinctiveness.

For centuries in many urban areas, traditional local materials were employed for the treatment of the spaces between the buildings – in particular cobbles, wood blocks, stone setts, riven York stone, and gravel. These harmonised with the built fabric to engender a very distinct sense of place, as well as an atmosphere of historical continuity. Today, one of the most pressing problems facing many conservation areas is the erosion of this local character and identity by misguided environmental 'improvements', often by the very local authorities charged with their proper conservation.

The pervasive nature of this threat was recognised in Circular 8/87 (para 65), when clear references were included on the importance of the floorscape of conservation areas. It affirmed that 'the floorscape often makes a vital contribution to the character of a Conservation Area', and it went on to emphasise that 'every effort should be made to retain or reintroduce the traditional surfaces eg natural stone paving or setts wherever possible. If the introduction of new surfacing materials is unavoidable, the texture or colour should be sympathetic to the setting.'

Unfortunately, in an increasing number of historic areas, one can see streets of historic buildings which have been cherished for generations and restored with skill, care, and sensitivity badly served by an inappropriate treatment of the spaces between them.

An important part of the character of many historic areas is the subtle relationship between the height of the buildings – including front basement areas where these exist – and the width of the street, offset by carefully proportioned pavements defined by granite kerbs.

High Street, Sedbergh, Cumbria: reinstated stone setts enhance the local character and reinforce local identity

This subtle gradation of historic spaces can easily be destroyed by the imposition of a ‘fitted carpet’ of wall-to-wall paving, often using alien, modern concrete paviours in a variety of jazzy patterns and colours. In recent years, portions of historic towns as diverse as Dorchester, Winchester, Carlisle, Nottingham, and Stamford, as well as several parts of London, have all been treated in this way. Inexplicably, perfectly sound traditional rectangular paving slabs, laid in an interlocking pattern, are being discarded in favour of square, white concrete blocks, of a scale which, historically, is wholly wrong for the street in question. The result of these unnecessary and unsympathetic changes is a major erosion of the character of whole areas rather than the enhancement of their historical ambience.

An early example of this undiscriminating approach may be found at Fitzroy Square in London, an ‘enhancement’ scheme of the 1970s which now looks tired and dated, compromising one of the finest Georgian squares in the capital. The ordered, geometrical relationship between the original, Grade I listed Adam buildings, the carriageway, and the circular central gardens has been impaired by a sea of concrete paving lined with deep gullies. This ‘amenity space’ has been randomly strewn with cheap seats, concrete bins, bollards, and a clutter of poorly-designed street furniture, culminating in large metal gates and ‘No Entry’ signs which restrict access to the square. The original intention may have been laudable, but the end result is counterproductive.

Conversely, the Covent Garden piazza, which was laid out at the same time, has worn well with its careful attention to original townscape detail, and the use of good-quality traditional materials–York stone and granite setts. Unfortunately, scholarly, well-executed schemes like this, using high-quality materials, remain the exception rather than the rule.

In order to demonstrate the advantages of a correct, low-key approach using local materials, in 1988 English Heritage collaborated in a joint venture with Cumbria County Council and the Yorkshire Dales National Park to repave the High Street at Sedbergh, Cumbria, using local stone setts. The result is a very real enhancement of local character which is genuinely popular, as it reinforces rather than diminishes local identity. In contrast, however, at Abingdon in Oxfordshire, the County Council are pursuing proposals to remove the fine existing stone setts and paving in the Market Place in favour of concrete blocks, on grounds of easier maintenance.

Far too many such ‘improvement’ schemes achieve the opposite effect and destroy the character that they are intended to enhance. As the use of universal modern paving materials becomes more widespread, so increasingly one historic area ends up looking much like another – the exact reverse of the original idea of conservation area enhancement. In an effort to ensure that this is avoided in future, two pilot studies are under way in London to develop a more considered approach to everything from street furniture to advertising. The first, supported by the Department of the Environment through the Civic Trust, is a coordinated programme for The Strand, embracing all aspects of the environment from shop fronts and signs to floodlighting, paving, and street furniture. The London Region of English Heritage has prepared a study as a key input into this programme.

Nearby at Seven Dials, the Seven Dials Monument Charity and a private developer have commissioned a report from the Civic Design Partnership which sets out a practical and

detailed framework for change for the whole area. This includes new development and sympathetic facelifts for buildings and the spaces between them, based on painstaking architectural and historical analysis.

It is important to ensure that preservation and enhancement of conservation areas mean what they say. This entails adopting traffic management or road and footpath treatments, which are in harmony and sympathy with the buildings which they complement. In certain cases, there may be a need to correct over-modern solutions to such problems. Historic identity and local character are important and fragile: they can be swamped by 'environmental improvements' if we do not realise what is beginning in some places to happen now and do not carefully rethink our approach.

PHILIP DAVIES

TRUNK ROADS AND ARCHAEOLOGY

In the planning of any development it is extremely important that decisions about the protection, management, and recording of archaeological sites that may be affected are made from a position of knowledge. The Planning Policy Guidance Note issued by the Department of the Environment in 1990 on *Archaeology and planning* emphasised the importance of a period of assessment and evaluation, before decisions are taken about where to site a particular development and what sort of foundations to employ. The PPG enables the planners, engineers, and archaeologists to make sensible decisions about whether to preserve the remains where they are or to record the information before it is destroyed for good.

It is therefore particularly welcome news that the Department of Transport will in future be directly funding the archaeological surveys which are carried out before a trunk-road is built or improved. This new funding will be in addition to the £500,000 which the Department of Transport gives to English Heritage each year for the recording and publication of archaeological sites. Such evaluations may lead to a road being realigned to avoid an important site, or to the raising of a road-level to protect archaeological remains beneath it. Such surveys to identify the possible impact of road proposals on archaeological remains will in future be part of the environmental assessments which are standard practice on all national trunk road and motorway schemes. Close links will need to be forged with the regional staff of the Department of Transport, English Heritage, and local archaeologists, and the decision by the Department of Transport is a very welcome step forward, acknowledging the integral part which archaeology must have in all the complex considerations of new road developments.

GEOFFREY WAINWRIGHT

EUROPEAN COMMUNITY GRANT SCHEME

In late July, the European Commission announced details of the projects which were successful in obtaining awards under its Pilot Scheme for the Conservation of the Architectural Heritage. The theme for 1991 specified that projects must be 'testimonies to production activities in industry, agriculture, crafts etc' and, of 433 submissions, more than 40 were made from the UK. With a total budget of only 2.6m Ecu (£1.8m), the maximum grant a project can expect is low and subject to an absolute maximum of £105,000. English Heritage as a national agency is involved in commenting on applications and as a participant to the discussions which frame the rules within which the scheme operates. In particular, at the last meeting in Brussels held earlier this year, the need for guidance on the nature and scope of the dossiers which comprise the grant applications was discussed. As a result, the Commission staff have undertaken to consider the publication of a brochure to assist applicants.

The selection panel which meets in July is formed of nominated experts. On the last occasion, Barrie Trinder of the Ironbridge Institute attended from the UK. Thirty-seven projects were selected by the panel, including four from the UK: Barnham Tower Windmill, West Sussex; Newport Transporter Bridge, Gwent, Wales; Levant Mine Beam Engine and House, Pendean, Cornwall; and the Upper Swaledale and Arkengarthdale Conservation Area, North Yorkshire. The projects were selected to 'illustrate the extreme diversity and wealth of the European heritage' in relation to the chosen theme. Perhaps disappointingly, the Queen Street Mill project near Burnley, which is possibly unique in Europe, was not selected.

Within the coming weeks, the official *Journal of the European Community* will carry details and application forms for the 1992 scheme. This will seek to assist projects which aim to upgrade public spaces in historic centres, and particular attention will be paid to the immediate environment of historic buildings. As the national agency, English Heritage will again be involved and prospective applicants can contact J Gallagher for further advice at Room 409, Fortress House, 23 Savile Row, London W1X 1AB; telephone 071-973-3849.

PETER WHITE

CONSERVATION BODIES MERGE

A significant step was taken towards the rationalisation of European conservation bodies when Europa Nostra (EN) and the International Castles Institute (IBI) formally merged in September at their joint general assembly in Dublin.

The IBI was founded in Switzerland in 1949 with the aim of promoting a wide interest in the protection and conservation of historic monuments (castles, fortified buildings, and historic houses, and their associated parks and gardens) and of supporting national and international institutions with similar aims. Its activities included the organisation of conferences and visits, the production of an annual bulletin which includes the results of scientific work carried out by IBI, and collaboration and consultation with other international bodies.

Europa Nostra was founded in 1963 as a confederation of independent conservation associations, working throughout Europe towards a general improvement in the quality of life, both in the natural and the built environment. EN's aims include awakening the pride of the European peoples in their common history and heritage, drawing attention to the dangers which threaten that heritage, and actively encouraging high standards of appropriate planning and architecture in town and countryside.

Amalgamation of the two organisations will bring about a number of benefits. It will reduce the number of organisations currently active in conservation in Europe, contributing towards the provision of a better focus for efforts which are currently spread among several different agencies. The combined organisation will be stronger both financially and in membership and should be able to operate more effectively, both internationally and on a national basis. This is particularly important in view of the new challenges arising from the changes in central and eastern Europe, where both organisations are already represented.

The merged organisation*, which will be known formally as 'Europa Nostra united with the International Castles Institute' will be controlled by a council, containing elected and coopted representatives of member and associated organisations, and a smaller management committee. Membership arrangements are complex: they include provision for non-governmental, non-profit making organisations, regional and local authorities, universities, other supporting organisations, and individual persons.

EN/IBI will continue and consolidate the existing activities of the parent organisations. These include:

the collection, analysis, and diffusion of knowledge about European developments in the cultural and natural heritage field
the existing medal and award schemes
the work of the scientific council
campaigns on specific and topical environment and cultural heritage issues
the organisation of open days, conferences, and workshops
and the production of publications.
In addition, the council agreed that as a major new initiative the merged organisation should seek to establish a comprehensive special programme of initiatives aimed at helping the countries of central and eastern Europe to confront their conservation and heritage problems. Extensive preparatory work has already taken place; parts of the programme should be quickly in hand, although the full programme will probably not be up and running until the beginning of 1993.

OLIVER PEARCEY

* Address: Lange Voorhout 35, 2514 EC The Hague, The Netherlands; phone 31-70-3560333

REVIEWS

ARCHAEOLOGY IN THE NATIONAL PARKS

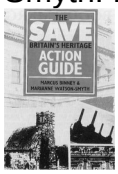
Archaeology in National Parks, edited by R F White and R Iles, published by National Park Staff Association, Yorkshire Dales National Park, Yorebridge House, Bainbridge, Leyburn, N Yorks, DL8 3BP, price £4.50.

This volume, mainly a series of papers contributed at an archaeology workshop in 1989, is intended to provide a snapshot of work taking place in the 11 National Parks in England and Wales. A brief introduction usefully summarises the increasing recognition of archaeology as one of the valued resources within these areas and acts as a preamble to the 11 papers which deal with specific aspects or projects in various areas of the country. The introduction is an essential focus to the volume, pulling together what might otherwise be seen as disparate accounts of work in progress, and serves to show the variety of ways in which National Parks are setting about the task of identifying, understanding, managing, and interpreting the archaeological aspects of their areas.
The papers in the volume vary in scope and scale. Some are accounts of fieldwork surveys – as in the Brecon Beacons Park – or of full excavations, as at Carew on the Pembrokeshire Coast. General overviews of the conservation approach to their characteristic archaeological sites are provided for the Peak District, Northumberland, North Yorkshire Moors, and Dartmoor, and also for the industrial sites of the Yorkshire Dales and the Lake District. There are also descriptions of individual management approaches to specific sites, such as Old Burrow Roman signal station, Countisbury in Exmoor, or Cawthorn Camps in North Yorkshire. The volume ends with a review of survey activity by the Royal Commission on the Historical Monuments of England within the National Park area.
The book is valuable in presenting a number of pointers to what is possible in these areas where the conservation interest is heightened because of the National Park status. It clearly represents only the tip of an iceberg of work, but is able to point to a number of clear achievements, as well as productive lines for the future.

STEPHEN JOHNSON

ACTION GUIDE

The SAVE Britain's Heritage action guide, by Marcus Binney and Marianne Watson-Smyth. Published by Collins & Brown, price £6.99.



SAVE–never Save, but always in urgent capitals – was set up in the wake of the *Destruction of the country house* exhibition held at the Victoria & Albert in 1974 as a campaigning group dedicated to championing Britain's built heritage. This book relates SAVE's story and, through a large number of case-histories, shows how imaginative and incisive publicity can arouse public interest sufficient to arrest destruction and arouse local involvement in conservation.

Starting from the premise that 'endangered public buildings are news', SAVE used the journalistic skills of several of its founders (including Simon Jenkins and Marcus Binney) to issue a growing flow of releases and well-researched reports. SAVE's celebrated purchase in 1981 of Sir Robert Taylor's Barlaston Hall for £1 and subsequent legal struggle to consolidate it (here described as 'the Gettysburg or even the Stalingrad battle for preservation in England') epitomised its direct involvement in campaigning.

Country houses constitute the majority – perhaps too many – of the case studies in this book, followed by churches and industrial buildings. Its report, *Silent mansions*, devoted to decaying country houses, appeared in 1981; within three years, a third of the houses featured in the report had found new owners and uses.

This *Action guide* advises by example: only 12 of its 150-odd pages are given over to 'how to save' suggestions for the inexperienced conservation activist, but these pages contain much shrewd and useful advice.

The book is timely: SAVE's battle to preserve the Number One Poultry site continues yet, but the awarding of large costs against such a small voluntary body jeopardises its very existence. Overall, the book sums up, without undue self-satisfaction, the achievement of this eloquently shrill pressure group.

ROGER BOWDLER

SAVING HISTORIC HACKNEY

This exhibition is the first in a series planned to highlight buildings at risk in inner London and the work being done to save them. Organised by English Heritage in conjunction with the Hackney Society, the National Trust, and the Heritage of London Trust, it attracted over 1500 people during the 13 days that it was on display at Clissold House, Stoke Newington. Since then, the exhibition has appeared at Hampton Court as part of a wider symposium organised by the London Forum. It is touring local libraries throughout Hackney until April 1992.

CHURCH GLASS

The Council for the Care of Churches has produced a new booklet in the series 'How to look after your church' entitled *The repair and maintenance of glass in churches* by Jill Kerr. This is adapted from the author's chapter on the repair and maintenance of historic glass published in volume 5 of the English Heritage Technical Handbook *Practical building conservation.* It deals with all aspects of church glass conservation, from diagnosing defects to cleaning and repairing glass, and providing external protection. There are guidelines for the protection of historically important glass, advice on commissioning a new window, a glossary of terms, and suggestions for further reading. The booklet is available

from bookshops, price £4.50, or direct (please add 35p for postage and packing) from: The Council for the Care of Churches, 83 London Wall, London EC2M 5NA; telephone 071-638 0971.

STONE CLEANING

The Robert Gordon Institute of Technology at Aberdeen is organising an international conference on stone cleaning which will take place on 14–16 April 1992 at the Heriot Watt University Conference Centre in Edinburgh. The conference will re-examine current techniques and philosophies in the light of recent product developments and pollution problems and will bring together the research findings and contractual experience of stone cleaning and preservation experts in the UK, Europe, and the USA. Further details are available from: Mrs Karen Sage, Conference Organiser, Faculty of Design, The Robert Gordon Institute of Technology, Aberdeen AB9 2QB; telephone (0224) 313247 ext 3717.

NOTTINGHAM HQ

Five architectural practices were invited to submit limited ideas on two buildings which could become the new headquarters for English Heritage in Nottingham, as part of a competition to select an architect for the feasibility study. The successful practice, Niall Phillips Architects of Bristol, leads a design team which includes structural engineers Alan Baxter and Associates, service engineers Oscar Faber, quantity surveyors Gleeds, and property development consultants Frank Innes. The team is looking at three Nottingham sites: the British Waterways Board Warehouse, the Low Level Station at Sneinton, and the Adams Building in the Lace Market. The feasibility report will identify a preferred HQ site prior to a full design study

PROFESSIONAL DEVELOPMENT

The Institute of Advanced Architectural Studies (IoAAS) at the University of York is offering a series of short courses aimed at continuing professional development for those involved in building conservation and, through the Centre for the Conservation of Historic Parks and Gardens, for the conservation of historic landscapes. The wide variety of courses and the more in-depth postgraduate programmes are outlined in a prospectus from which fuller details can be requested. Available from: The Secretary, IoAAS, The King’s Manor, York YOl 2EP; telephone (0904) 433987.

COMPETITIVE TENDERING

The use of competitive tendering has been an area of much debate within archaeology in recent years, as standard practices have evolved and changed in the execution of archaeological excavations. A one-day conference on this theme was held in June 1990 and the papers there presented are now published as a booklet, which includes a statement by English Heritage on this issue and a copy of the Institute of Field Archaeologists’ Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology. The booklet, published jointly by RESCUE and SCAUM (the Standing Conference of Archaeological Unit Managers) as *Competitive tendering in archaeology*, *is* available for £2.45 to RESCUE and SCAUM members and £2.95 to non-members (inclusive of postage and packing) from: RESCUE, 15A Bull Plain, Hertford, Herts SG14 1DX.

CONSERVATION GROUP

In August 1991 Stephen Johnson, until now editor of the *Bulletin* and head of the academic and specialist publications branch, became the new head of the North Region of Conservation Group. Correspondence arising from the *Bulletin* should continue to be

addressed to Room 207, Keysign House, as noted on the back page. Please note that general enquiries to other parts of English Heritage should be directed through the switchboard on 071-973-3000 and to the main address at Fortress House, 23 Savile Row, London WIX 1AB.

SPRINGWOOD HUDDERSFIELD

Following the regeneration of a rundown area of Huddersfield which was designated a conservation area and housing action area in 1981, Kirklees Metropolitan Council has won a Europa Nostra award for the work. Many of the houses within the area are listed buildings and were renovated and repaired, while the streets were refurbished with traditional paving, ironwork, and street furniture; English Heritage provided support for this work. The Diploma of Merit awarded by Europa Nostra reflects the success of the scheme in transforming the area and the high standard of town planning; it has been followed by another award as the outright winning entry of the Housing Estate Environmental Improvement category of the *Local Government News* 'Street Design' competition. The area is a showpiece of successful restoration of older housing, with environmental and highway improvements and landscaping works.

PPG16

Following the publication of *Planning policy guidance: archaeology and planning* in November 1990 – as referred to in *Conserv Bull*, **13**, 21 and **12**, 1–2 – English Heritage (on behalf of the DoE) is seeking the assistance of all county archaeological officers in monitoring the impact of the guidance note in practice. The Chief Archaeologist, Geoffrey Wainwright, has written to all county archaeological officers to ask them for feedback on key areas by 31 December 1991: this is to determine whether developers are now producing adequately detailed planning applications by consulting at an earlier stage in development proposals with planning authorities and archaeological officers, and to what degree archaeological evaluations are being carried out in advance of decisions on planning applications. The initial assessment can only be a preliminary statement, as the guidance note was only published within the last year, but will be useful in determining its effectiveness. Further details are available from the Archaeology Division at Fortress House, 23 Savile Row, London WIX IAB; telephone 071-973 3013.

FARMING HISTORIC LANDSCAPES

English Heritage and the Agricultural Development and Advisory Service (ADAS) have worked together to produce a booklet on countryside conservation: *Farming historic landscapes and people.* This has been written specially for farmers and offers advice on caring for a countryside resulting from 6000 yearn of changing farming activity. Thebooklet describes how archaeological sites above and below ground can he identified and conserved ss part of good agricultural practice. English Heritage can provide grants to land users for surveying features of historic interest on their land, and where sites are deemed to be of national importance, schemes can be agreed to provide financial assistance in return for controlled and sensitive management. The booklet also details the Ministry of Agriculture, Fisheries and Food Farm Diversification Grant scheme. Copies of the booklet can be obtained from local ADAS offices or from English Heritage, Room 309, Fortress House, 23 Savile Row, London W1X 1AB; telephone 071-973 3192.

The Royal Town Planning Institute has produced a draft policy framework for rural areas, *Rural planning in the 1990s*, which looks at the main influences on the rural scene, including agriculture, conservation, recreation, tourism, minerals, and waste disposal. After comments on the draft have been collated, the RTPI intend to adopt a policy framework later this year. Further details from: RTPI, 26 Portland Place, London WIN 4BE; telephone 071-636 9107.

SCIENCE AND CONSERVATION SERVICES

Further reorganisation within English Heritage has resulted in the formation of the Science and Conservation Services Division within the Technical Services Group. The new Division comprises the Ancient Monuments Laboratory, the Picture Conservation Studio, the Research and Technical Advisory Service, the ironsmiths, and the stonecarvers. The Ancient Monuments Laboratory continues to provide a service for archaeological science, but will now provide science and conservation skills over a much wider range of environments and materials.

CONSERVATION SOURCEBOOKS

The Conservation Unit of the Museums and Galleries Commission has produced a new and completely revised edition of the *Conservation sourcebook.* First published by the Crafts Advisory Committee in 1979, this has remained an invaluable source of reference for those wishing to locate an organisation which can offer help in a specific area of conservation (in its widest sense). Arranged alphabetically by organisation, with cross-references to other entries, each entry is laid out in a systematic manner with details of the organisation, its publications, membership, and advisory services.
The *Conservation sourcebook is* available for £11.95 from HMSO through appointed agents, HMSO bookshops, or by post from: HMSO Publications Centre, PO Box 276, London SW8 5DT; telephone 071-873 9090 (orders) or 071-873 0011 (enquiries).
The Scottish Conservation Bureau of Historic Scotland has published the *Scottish conservation directory:* this lists 180 workshops and firms in 14 main conservation categories. The job of the Bureau is to provide information, advice, and support to all concerned with the conservation of historic artefacts and cultural property in Scotland. The book has an introductory section, illustrated with colour photographs, which gives commonsense advice on looking after different types of object and choosing a conservator. The directory entries are clearly laid out by main disciplines and objects and it lists examples of work done by the firms and specialists. The directory costs £9.50 and is available by post from: The Scottish Conservation Bureau, 3 Stenhouse Mill Lane, Edinburgh EH11 3LR; telephone 031-443 1666.

ARCHAEOLOGICAL CODE OF PRACTICE

The British Archaeologists and Developers Liaison Group has updated and re-issued the voluntary code of practice which applies to archaeological investigation and recording on development sites by agreement between archaeological bodies and developers. Sponsored by the British Property Federation and the Standing Conference of Archaeological Unit Managers, it is also supported by English Heritage along with other archaeological and architectural bodies. Copies are available for £1 (post free) from: The Department of Urban Archaeology, Museum of London, London Wall, London EC2Y 5HN, and the British Property Federation, 35 Catherine Place, London SW1E 6DY.

GOLF COURSES

As reported in *Conserv Bull*, **14**, 18 and mailed out with that issue, English Heritage has produced a policy statement on golf course development proposals in historic landscapes. The Georgian Group have now launched their own report, entitled *In the rough? – Golf courses and landscaped parks*. The report underlines that golf courses should not be constructed in parks of historic importance, especially those that are unspoilt, because of the threat to the landscape and the extra facilities which are often built as part of a development; truly derelict land could be used for golf courses to enable the restoration of decayed parks and houses. The report also stresses the need for full evaluation of landscapes in advance of planning permission and development and the implementation

of proper management plans for courses that are granted permission. The report is available for £3 plus postage and packing from: The Georgian Group, 37 Spital Square, London E1 6DY; telephone 071-377 1722.

HISTORIC INTERIORS

The Georgian Group and Temple Newsam are running a study day on historic interiors on 2 December, based at Temple Newsam house, east of Leeds, and featuring the magnificent interiors there. There will be lectures by national authorities on wallpapers and their conservation, textiles, floor coverings, and Temple Newsam house itself. The archive of textiles and papers at the house will also be open for inspection. Further details from The Georgian Group, 37 Spital Square, London E1 6DY; telephone 071-377 1722.

URGENT REPAIRS NOTICES

The former school at Weston-in-Gordano, showing the state of the building in 1986; the roof tarpaulin put in place with the first urgent repairs notice has slipped and further works were carried out in 1989 to save the tiles from the roof, as these were disappearing, and replace them with battens and felt; the bellcote has also now been removed for safety (A Sims)

Woodspring District Council, in Avon, have used the powers available to them under section 54 of the Planning (Listed Buildings and Conservation Areas) Act 1990, to serve an urgent works notice on the former village school at Weston-in-Gordano, which is an unlisted building in a conservation area. Under section 76 of the Act, the Secretary of State may direct that section 54 can apply to an unlisted building in a conservation area, if he is satisfied that its preservation is important to the character of the area (these sections were previously covered under section 101 of the 1971 Act). Local authorities are not always aware that they can use this power, or how to go about it.

Built in 1859, the school is a single-storey building of coursed local stone with ashlar quoins to the decorative windows and doorways. It has stepped gables, one of which was surmounted by a bellcote. The steeply pitched roof had plain clay tiles with intermediate courses of scalloped tiles. Centrally situated in the conservation area, it was last used as a school in 1960, since when it has deteriorated and become an eyesore.

Woodspring DC made contact with the owner and requested that he should give them, in writing, his assurance that he would carry out the essential repairs. The owner failed to provide this assurance. The Council therefore wrote on 2 March 1984 to the Secretary of State, enclosing a location plan, photograph, and copies of correspondence with the owner. The Council expressed the view that the building was regarded as important in maintaining the character and appearance of the conservation area, and that its deteriorating condition was a cause of concern to the Council's Planning Committee. They therefore requested the Secretary of State to issue a Direction in relation to the building under the provisions of section 101(3) (now section 76) of the legislation in order that the Council could be in a position to implement the compulsory powers that they required.

On 9 May 1984, Woodspring received the Direction from the Secretary of State. The grounds for this were that the building is prominent and visually important in the street scene, unoccupied, and in a state where progressive deterioration would occur unless repairs were carried out. Preservation of the school would maintain the character and appearance of the conservation area.

The Council served the urgent works notice under the powers now contained in section 54 of the Act on 10 September1984. The schedule required the removal of ivy, that tarpaulins be secured over the roof, and that doors and windows be boarded up. As a result, the owner carried out the essential repairs and the building was made safe. Further notices had to be served in 1986 in order to put a reinforced tarpaulin place and in 1989 to remove the tiles from the roof, as these were disappearing, and replace them with battens and felt; the bellcote has had to be removed as a dangerous structure.

Any local authority (or even a member of the public) may ask the Secretary of State for a Direction under section 76 for any unlisted building in a conservation area, provided that it can show that the building is important for maintaining the character and appearance of that conservation area. Obtaining a Direction does not in itself commit a local authority to serving the urgent works notice. For guidance on this, refer to Circular 8/87, paragraph 125. Section 215 of the Planning Act, concerning the amenity of an area, could be used as an alternative to section 76; this will be the subject of a further article.

GAYNOR ROBERTS and ANITA SIMS