

3 million. The board has decided that the shortage cannot be met either by estuarial barrages or by desalination of seawater. Barrages take too long to plan and build, even if they are proved to be feasible, and desalination would be too expensive. Even from a dual plant making use of a nuclear power station, the board estimates that water would cost between 5s 8d and 7s 9d per 1,000 gallons, about four times the cost of the conventional schemes. The board therefore considered eight possible inland schemes, and decided that Swincombe offered the best prospects.

The choice, it seems, lay between Swincombe and a site at Lee Mill, which would have been the cheapest and most convenient. But it would have involved flooding 475 acres of good agricultural land, and displacing people from nineteen houses which would have been swamped. Faced with this decision, the board has decided that intrusion into the National Park is the lesser evil, although it accepts that it will "completely alter the appearance of the area". The board suggests that after the reservoir had been built the access roads could be removed, keeping the area remote.

Although the board has made its preference plain, it is almost certain that there will have to be a public enquiry before the plan can go ahead. After the enquiry, the decision will rest with the Minister of Housing and Local Government, Mr Anthony Greenwood. So far, there have been no public objections, but a spokesman for the Countryside Commission said that its policy was "to oppose any development of reservoirs in National Parks". The Nature Conservancy may also be expected to weigh in. It is unlikely, however, that feelings will run as high as they did when the proposal was made to build a reservoir in Teesdale. As well as being remote and beautiful, Teesdale was of considerable scientific interest.

## ARCHAEOLOGY

### Anglo-Saxon Domestic Life

from our Archaeology Correspondent

A MORE or less complete picture of life in a small and self-supporting pagan Anglo-Saxon village in East Anglia is emerging from an excavation at West Stow in Suffolk. During the past four seasons, half of the village site (which occupies about 5 acres on the top of a low sandy knoll on the north bank of the River Lark) has been excavated under the direction of Mr S. E. West on behalf of the Ministry of Public Building and Works. With luck the entire village should have been excavated before the site is engulfed by the growing rubbish tip of Bury St Edmunds nearby.

West Stow is uniquely important simply because it is the only complete Anglo-Saxon village yet to be excavated in Britain. Other sites are usually cemeteries or fragmented settlements. Mr West and his colleagues are confident that they know the boundaries of the village, because in Saxon times the knoll was an island enclosed by two arms of the Lark. So far, forty small rectangular huts, exactly comparable to the "grubenhäuser" of the Saxon continental homeland, have been excavated (Fig. 1), and, because two had burnt down, charred timbers have survived. From these it is clear that the huts had vertical plank walls 2 inches thick, plank floors and reed thatched roofs. Some were used for storage and a considerable amount of charred cereal



Fig. 1. Plan of part of the Saxon village at West Stow.

awaits analysis. At least two other huts must have been weaving sheds. So far no really large hall—no Heorot—has been found, but two buildings larger than the huts, one 30 feet long and the other 26 feet long, have been excavated (Fig. 2).

Unless a princely hall is discovered when the remainder of the site is excavated, which would be most unexpected from all the artefacts so far recovered, it seems reasonable to infer that the village housed a simple peasant community from its beginning in the late fourth century until it was abandoned in the middle of the seventh century. Apart from pottery, more than 1,100 artefacts including many animal bones, all in a very good state of preservation because of the dry sandy soil, have been recovered. When all this material has been analysed, it should provide an invaluable picture of the life of the ordinary Saxon peasant and the economy and evolution of his village over some 250 years. In this sense the excavations will complement the evidence from Saxon royal sites such as Sutton Hoo. The excavation is also bound to lead to an improved scheme for the dating of Anglo-Saxon pottery, which is at present riddled with uncertainties.

The broad outlines of the history of the village have emerged already. West Stow was an extremely early Saxon settlement started some time in the second half of the fourth century when Britain was still a Roman

province. More than a hundred Roman coins of this period have been recovered (some are pierced and were probably used as jewellery) as well as faceted angled Saxon pottery of an early type and one particularly significant belt tab of a type characteristic of the uniform of *Foederati*, Saxon mercenaries of the Romans. Towards the end of the fourth century, it became imperial policy to settle invaders, who initially came to plunder, on the borderlands of the Empire and to give them land in exchange for military service. It may well be that the Saxon settlement at West Stow began in this way. Certainly the Saxons there must have co-existed with Romans and Romano-Britons, for at Icklingham, only two miles away, a contemporary Roman villa has been excavated.

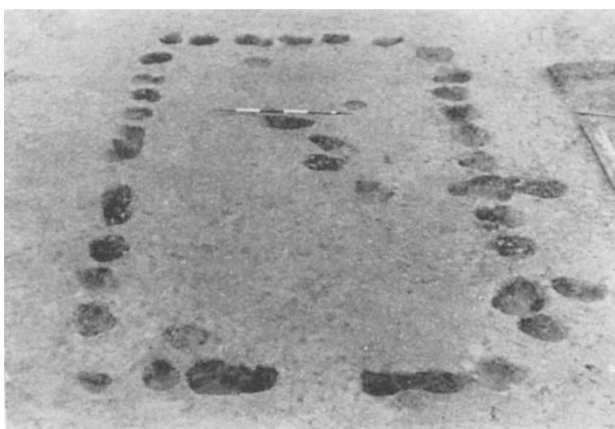


Fig. 2. Post holes of one of the small halls at West Stow. The doorway was probably on the south (right) side.

As Roman civilization decayed after 436, the Saxon settlement continued to flourish until about 650. Apart from potsherds a complete range of domestic objects including bone combs, loom weights, spindle whorls, brooches, rings, iron knives and shears and bronze spoons and many animal bones, have been recovered. It seems that the village had many more sheep than any other domestic animals and weaving must have been an extremely important part of its economy. When all the animal bones have been statistically analysed, they should provide much detailed information on the animal husbandry of the period. As well as domestic animals, the Saxons ate deer, fish and many wild birds including the European crane, now extinct in Britain. The village seems to have made its own pottery, for pottery stamps made of antler horn matching the decorations on some of the potsherds have been found. There is also some evidence of limited metal work in the village, which must have been basically a self-sufficient unit.

At first sight, it may seem surprising that only one spear and a few arrowheads have been excavated, but weapons were usually buried with their owners. In the 1850s, a pagan cemetery was excavated on the nearby heath, and many weapons were found, some of which are now in museums at Oxford and Bury St Edmunds; this must have been the village cemetery. In the middle of the seventh century, West Stow was abandoned, perhaps because it had become too small. There is no evidence of any violent end to the occupation. By the eleventh and twelfth centuries the site

was ploughland, and a fascinating sideline of the main excavation has been the uncovering of the medieval ridge and furrow system and the plough lanes. These appeared beneath the present sandy topsoil and it seems that some time in the late twelfth or early thirteenth century a dust blow suddenly deposited a foot or more of sand on top of the field which has remained covered ever since.

## BRITISH ASSOCIATION Beating the Breast

from our Special Correspondent

*Dundee, Monday*

THERE seems to be a strong if not quite unifying theme running through this year's meeting of the British Association, which with its wealth of rival attractions and celebrities seems to be providing a counterpart to the other festival in nearby Edinburgh. After Dame Kathleen Lonsdale's presidential address "Science and the Good Life", in which she discussed some of the good and bad effects of science, many other speakers have taken a similar theme and applied it to their own branch of science. The resulting impression is that the meeting is very much concerned with the relevance of science to life. Both the general symposia, being held for the second time after their success last year, and this year's innovation—the public lecturers—have been concerned with this theme. Members of several of the special sections have also been discussing the social and economic value of their specialisms.

The three plenary symposia in the programme have been on regional planning and transport development, factory farming and disasters. In the first symposium, four experts on planning and transportation described how they have collected data about travel habits and needs, and have used them to build and modify a model from which the best transport system for East Central Scotland can be selected. One of the problems seems to be that it is very difficult to produce a streamlined and coordinated transport system when so many vested interests have to be accommodated. The report on the transportation study has yet to be presented to the local steering committee, and any number of difficulties could arise. Apparently it is often difficult to translate the planner's language into a form acceptable to the lay members of local councils. Even some of the audience at the symposium were clearly worried by the incomprehensibility of such technical jargon as "travel desire characteristics which exhibit universal stability". The chairman, Professor Johnson-Marshall of Edinburgh, suggested that there should be more courses to initiate councillors into the planners' world, and perhaps more meetings at which the public could make their views known, however impractical they might be.

This symposium had an interesting supplement in the form of an evening meeting when four local and obviously prosperous industrialists explained some of the advantages and disadvantages of locating industry in East Scotland. The principal advantages emerged as the ready availability of an able and loyal labour force, the financial support given by the Government for factories to be set up in this development area and the attractiveness of the region. The principal