HISTORIC ENVIRONMENT

Agri-environment schemes

Agri-environment schemes provide major benefits to the historic environment, with the potential to achieve far more. This article examines the schemes, in particular, Environmentally Sensitive Areas and Countryside Stewardship Schemes, and their successes Government agri-environment schemes have been in operation in England since 1987. Over the past 15 years they have expanded and taken an increasingly active role in the protection and management of the rural historic environment. Following the Agenda 2000 reform of the Common Agricultural Policy, the schemes have been incorporated in the England Rural Development Programme, and are likely to double in scale over the next six years. The growth of the schemes has run concurrently with the development of landscape management techniques and a new understanding of the pressures on the historic environment created by intensive farming. This understanding includes the recognition that the system of price supports, initiated after World War II, has become anachronistic, having led to higher indirect costs to consumers and a degraded environment. The recent Foot and Mouth outbreak has shown how vital the countryside is to the rural economy.

In the design and implementation of agrienvironment schemes, a balance is struck between wildlife, landscape, historic elements, public access, practical land management and agricultural factors. This means that the schemes are broad-based with prescriptions that cover the wide variety of circumstances encountered on holdings nationally. Since their inception, however, the schemes have been developed to address specific technical issues both nationally and locally. Good examples are the Environmentally Sensitive Areas (ESAs), originally relatively simple schemes, which have, through periodic review, become more focused on specific issues within their borders. New options have also been added to the Countryside Stewardship Scheme to address specific land management issues, such as the enhancement of upland landscapes and the encouragement of arable bird populations. These changes affect the historic environment, notably through restoration of traditional farm buildings in both schemes and the option to manage upland archaeological sites.

Delivering benefits

The main schemes deliver benefits to the historic environment in different ways, given their history, implementation and the manner in which external advice has enhanced individual agreements. Underlying these differences, however, are common principles:

- Farmers and landowners can enter voluntary, ten-year agreements to undertake certain farming practices and capital works to maintain and enhance the rural environment;
- Agreement holders are compensated for undertaking the work by payments calculated on the basis of the income foregone (into which can be included a small incentive element, up to 20% of the total);
- Capital works are grant-aided up to a maximum of 80% of the total costs.

Under the schemes, the historic environment is protected in two ways: by cross-compliance and proactive works. Under cross-compliance, all agreement holders are obliged to prevent damage to environmental assets such as historic and archaeological features.

Cross-compliance

Two new cross-compliance conditions were introduced under the Agenda 2000 reforms. First, there is a greater emphasis on grazing management in order to ensure that permanent pasture fields on the holding, whether under agreement or not, are stocked at a sustainable level to prevent overgrazing and undergrazing on fragile earthwork sites. Second, there is a greater emphasis on adherence to the Code of Good Agricultural Practice and the Code of Good Farming Practice in order to ensure that agreement holders in breach of environmental legislation - including the Ancient Monuments and Archaeological Areas Act 1979 - may have their management agreements curtailed. Other England Rural Development Programme Schemes, including the Organic Farming Scheme and the Hill Farm Allowance, have similar cross-compliance conditions.

The effectiveness of cross-compliance conditions is assessed by on-site monitoring. Compliance checks and care and maintenance visits are undertaken by the Department of Environment, Food and Rural Affairs (DEFRA) staff, who



Bronze Age reaves in the Upper Plym Valley, Dartmoor. The archaeology of open moorland will benefit substantially from the introduction of sustainable stocking densities and proactive management works under agri-environment agreements

ensure that agreement holders are aware of their responsibilities, and by the Rural Payments Agency, which validates claims on work undertaken. In both cases, the evidence suggests that cross-compliance effectively protects sites and that there has been little new damage to archaeological sites under agreement. This conclusion is supported by the results of a formal monitoring process that is an integral part of the scheme and an obligation under EU rules.

The effectiveness of ESAs in the management of the historic environment was monitored between 1987 and 1998 through assessing changes in land-use and undertaking baseline surveys of individual monuments. The results suggest that monuments have been better protected on ESA agreement land than on land not under agreement, a finding particularly important in view of the significant land improvement in the late 1980s brought about by the first ESAs. Similarly, monitoring of the Countryside Stewardship Scheme, through appraisal of agreements, suggests that the scheme has been successful in protecting the historic environment.

Proactive work

The most important component of agrienvironment schemes is the pro-active work than can be undertaken to maintain, protect and enhance sites and landscapes. That work covers

the management both of specific sites and of landscapes. Management of specific sites includes general positive measures such as reversion of arable land to permanent grassland, scrub clearance, boundary restoration and fencing for grazing management, all undertaken as standard items within the schemes. In addition, there are measures individually tailored for each site, such as ESA Conservation Plans and Countryside Stewardship Scheme Special Projects, which permit specialist restoration of a wide range of individual sites, from Bronze Age barrows and medieval field systems, to a 19thcentury greenhouse and World War II airfield buildings. There is also a specific Countryside Stewardship Scheme measure to promote the management historic features (up to 1.5ha in extent) situated in Less Favoured Areas.

Restoration of traditional farm buildings

There are provisions within both schemes for restoration of traditional farm buildings – essentially pre-World War I structures in traditional materials (see Trow, 24–7). Under these provisions authentic materials must be used, with replacement on a like-for-like basis. Also, though grant-aid does not dictate the postrepair use of the building, the fundamental structure of the building cannot be changed. This element has increased in importance over

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the life of the schemes, although the level of uptake clearly reflects the levels of grant available. On upland both within ESAs and in Less Favoured Areas, the top rate is 80% of costs: in lowland ESAs and through Countryside Stewardship Scheme, the grant rate is 40–50%. Some ESAs have no buildings option.

Management of landscapes

In addition to these specific measures, the schemes also permit a wider understanding and management of the landscape. The Countryside Stewardship Scheme, for example, embraces historic landscape restoration projects including specific measures for parkland and water meadows. These are eligible for a one-year Restoration Plan to identify the value of the landscape and repair measures to be carried out under the full ten-year agreement that follows.

A common problem in all schemes is how to gather environmental and economic data so that each agreement addresses the full range of environmental issues. The Integrated Land Management Plans, developed by the Agricultural Development Advisory Service (ADAS) in the early 1990s, were based on a survey of wildlife, landscape and archaeology within a holding. That method of collecting environmental data was subsequently used in ESA and Countryside Stewardship Scheme agreements, realigned to take account of the practicalities of implementing large schemes.

Audit of environmental data

To include local circumstances in ESA agreements, Project Officers use environmental data provided by other bodies or new data acquired at the time of designation. Increasingly, new data has been obtained from Geographical Information Systems (GIS), and some ESA teams use the new ArcView-based Gen-i system containing a wide range of environmental data sets including SMR information. Environmental checks are undertaken for each application area, and the management agreements include the values and priorities identified. That system was developed to deal efficiently with large numbers of applications, particularly in the early years of the ESA.

Where the number of applications is small – the older ESAs or small designated areas – each is sent to the County Archaeologist for consultation. In the Blackdown Hills ESA, however, a different approach was adopted. A

survey undertaken at designation led to the compilation of a database of sites, each linked to generalised management prescriptions based on land-use, site complexity and survival, which is used by Project Officers to advise applicants.

In the Countryside Stewardship Schemes, environmental data has been acquired through consultations with partners. This approach was devised when the scheme was small, with less than 800 agreements nationally in the first year. County Archaeologists and English Heritage have been key partners, providing information on the location and management of both designated and non-designated sites. The enlargement of the scheme over the past ten vears - and most particularly the additional resources conferred by the England Rural Development Programme - has caused problems due to the large number of applications and a timetable for consultation driven by a single midsummer application deadline. DEFRA, English Heritage and the Association of Local Government Archaeology Officers (ALGAO) are exploring ways of resolving those problems.

Business data

A key element missing from earlier consultations has been data relating to the business of the holding, which would permit environmental actions to be related to the ability to undertake management action. Two 'Upland Experiments', each lasting from 1999 to 2001, have addressed this omission by linking the Countryside Stewardship Schemes with Objective 5(b) Structural Funding in the Forest of Bowland and Bodmin Moor. The Upland Experiments were seen as pilots to inform the development of future agri-environment schemes and rural development policy. Each application in these areas has been accompanied by a survey of the environmental assets of the holding accompanied by an assessment of the farm business. Through this audit, environmental data, including existing SMR information, is collated and synthesised and priorities identified. For archaeological remains in need of management action, a payment is available for 'Restoring historic features in upland landscapes', also available in other Less Favoured Areas.

This inclusion of environmental data, with partner organisations involved in the acquisition and the collation of data, has been adopted in other agri-environment schemes, most notably in the Welsh Tir Gofal and Scottish new Rural Stewardship Scheme.

Examples of good management

The workings of the agri-environment schemes are best illustrated by two recent examples from Devon where the schemes have contributed significantly to the protection of the historic environment:

Clayhanger Roman Fort, Devon:

This fort was discovered in 1987 through aerial photography followed by ground survey that revealed excellent survival of the enclosing ramparts as earthworks standing about 0.5m high. The field was under arable cultivation, and the ramparts, at the top of the slope surrounding the site, were considered under significant threat from erosion. The site was subsequently scheduled. An application for a Countryside Stewardship agreement was received in 1999 for the holding that included management works on boundaries, margins on arable fields and the reversion of the fort to permanent grass from arable which, by that time, was under 'set-aside'. This was a considerable commitment on the part of the farmer since the area of the fort was his most productive arable land.

The application was notable for the emphasis it placed on archaeology, possibly following a drive by the Farming and Rural Conservation Agency (now DEFRA) to raise awareness of the historic environment among partners who routinely submit applications to the Countryside Stewardship Scheme (see Bretherton, 56–7). The fort at Cudmore has now been reverted to permanent grass, to be managed under a sustainable stocking regime with no application of fertiliser. For the duration of the agreement, the threat of arable cultivation has receded, and continued agreements could ensure the longterm survival of the site.

This example reinforces the fact that farmers and landowners may undertake archaeological management works for reasons other than financial; in this case the farmer wanted to 'do the right thing' with an archaeological site in which he had gained an interest through the Countryside Stewardship Scheme.

Aerial view of Clayhanger Roman Fort at Cudmore, Devon, with surviving enclosing ramparts, discovered in 1987 through aerial photography followed by ground survey



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Braunton Great Field, Devon:

The Great Field at Braunton is a rare survival of an intact medieval open field in North Devon that covers 142 ha of Grade II arable land. It was never enclosed and is still divided into strips, which average 0.2 hectares, separated by thin strips of grass, known locally as 'landsherds', vulnerable to loss through ploughing. The only physical boundaries that separate the furlongs are additional ridges, many of which have survived as tracks, and stone markers, or 'bondstones', most of which have been lost (Exeter Archaeological Field Unit, nd). There has been a significant reduction in the number of strips from 448 with 62 owners in 1842 to 86 strips with 20 owners in 1994, reflecting the agglomeration of holdings that has accelerated in recent years.

The loss of the strips and the consequent detrimental effect on the historic character of the Great Field has been of concern for some time, largely because management options are not straightforward. The arable character of the field, which was never in a rotation system, needs to be retained while protecting and reinstating the nonstructural landsherds. These archaeological concerns also need to be balanced against the requirements of the farmers of the field who need to farm in a practical manner using modern machinery, usually incompatible with narrow strips.

In 2000 a scheme was introduced for the Great Field under the Countryside Stewardship Scheme Special Project provision whereby work outside the scope of Countryside Stewardship Scheme guidelines and standard payments could be undertaken. The aims of the Braunton scheme are to:

- Retain the historic character of the Great Field;
- protect existing landsherds and furlong boundaries;
- encourage restoration of landsherds and furlong boundaries (based on the 1842 Tithe Award map);
- ensure the ecological diversity of the landsherds.



Braunton Great Field, North Devon, showing 'landsherd' strip division and amalgamated strips in the background



A relic field boundary on Roborough Down, Dartmoor. This under-grazed common has seen substantial scrub clearance under an ESA Habitat Management Plan which has substantially benefited both the historic environment and ecology of the common

The scheme achieves these aims by ensuring that the landsherds are not ploughed but cut every year, that no fertiliser is applied and that furlong boundaries are managed.

Given the value of the land for cropping and its quality (it is the best land in the Braunton area), it has taken time to persuade farmers that the scheme is of value and will not detrimentally affect their farming systems. Due to the newness of the scheme, it is too early to demonstrate its future success, although the fact that one of the four farmers with the largest holdings on the field has applied augers well for the future. It is to be hoped that elements of the scheme can be used in other areas with similar problems, notably the strip fields of the Isle of Axholme where a Special Project is under consideration.

These examples are two among many that demonstrate management issues addressed by agri-environment schemes. This is not to say that there are not challenges ahead, some of which will be highlighted in the mid-term England Rural Development Programme review in 2003. In terms of the historic environment, these include: greater use of pro-active conservation measures to ensure that full use is made of the schemes; a balance between administrative simplicity and incorporation of effective technical advice into agreements; and a greater understanding of the impact of agricultural practices on the historic environment and ways to mitigate them through targeted research and development.

There is already a body of evidence, both from formal monitoring programmes and informal discussion, to confirm that the schemes are already having significant success in the protection and management of the historic environment.

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