

Forestry and the Cultural Landscape: Understanding the Past in the Present

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Summary

Afforestation will be the single most important agent of rural landscape change in Ireland in the 1990s. At the same time the value of another resource – the cultural heritage – is seen as the core of the drive to improve our tourist industry. This paper outlines the impact of afforestation policies on the cultural landscape, especially the archaeological heritage. It analyses the key issue of the nature and management of that heritage which is not as widely understood as it might be. Finally it suggests that a more sensitive approach would not only protect the archaeological heritage but lead to a better understanding of the role of woodland as an integral part of the historic rural environment.

Introduction

It is widely recognised that the 1990s and beyond will see major changes in the Irish rural landscape as the economic base of these areas diversifies away from traditional agriculture as a consequence of the reform of the EC Common Agricultural Policy. Two of the most important aspects of this diversification that have been recognised in the National Development Plan 1989-93 are afforestation and tourism. Both have the potential to create wealth and employment and to sustain people and communities on the land. The land and landscape are the space where these two vital Irish assets interact. The characteristics and quality of the Irish natural and cultural landscape are fundamental to the Irish tourism product (e.g. Anon., 1992). The driving force of the forestry programme is the expansion of the amount of public and privately-owned land under forestry with the aim of an annual planting figure of 30,000 hectares by 1993 (Anon., 1991a). Not only is this expansion of forestry creating a new cultural landscape but in turn it is taking place in a context of a record of human settlement in Ireland going back over 9,000 years. Any assessment of the impact of forestry on the environment must take account of this historic cultural landscape which

needs to be maintained, managed and protected if it is to be utilised as a core aspect of rural tourism.

Recognising the Nature of the Archaeological Resource

What has been said above will not be unfamiliar to anyone following the discussion about the impact of increased afforestation on the Irish environment. The EC-supported Forestry Operational Programme, the Forest Service of the Department of Energy, the legislation under which Coillte Teoranta was established and the operational procedures of Coillte itself all emphasise the importance of protecting the quality of the environment, including the built or cultural environment, with specific regard to avoiding inadvertent environmental disturbance or degradation as a result of afforestation policies. The recent publication of guidelines to help non-archaeologists involved in forestry development identify archaeological sites and monuments and to protect them during the different active stages in the forest development process (Anon., 1991b) indicates a concern for the archaeological heritage. There is a monitoring procedure whereby applications for grants for private forest planting in areas where sites are marked on the Sites and Monuments Records, produced by the Office of Public Works, the state body with statutory responsibility for archaeological sites and monuments, are referred to the Office of Public Works for comment and action where necessary.

But those guidelines and the monitoring procedure also illustrate very clearly that there is not a clear understanding of the nature of the archaeological heritage in the landscape or the extent to which it has been recorded. As pointed out above the basis of the monitoring procedure regarding the impact of afforestation on archaeology are the Sites and Monuments Records (SMRs). These are being produced on a county by county basis as the first of three stages in the compilation of a comprehensive survey and data base of archaeological sites in the state by the Archaeological Survey in the Office of Public Works. The second stage is the production of county Archaeological Inventories (e.g. Buckley 1986) and the final one is the compilation of full Archaeological Surveys (e.g. Buckley and Sweetman 1991) for each county. Where the three stages differ is in the accuracy and completeness of the records they contain. Sites and Monuments Records are based primarily on existing sources of information, such as the six-inch Ordnance Survey maps and estate maps, archaeological and historical journals and other documents, museum collections and archives and aerial photographs. The latter include both oblique photographs which tend to be of specific sites or areas and the vertical aerial photographs which have been taken for mapping or other purposes. The vertical aerial photography undertaken by the Institut Geographique National de France for the Geological Survey of Ireland covers the whole country and offers a valuable record of the landscape as it

was in the mid-1970s. This can be compared with the landscapes recorded on the various editions of the six-inch Ordnance Survey maps going back to the 1840s and to more recent aerial photography taken in the 1980s particularly by the Ordnance Survey.

What the Sites and Monuments Records consist of then is a rapid office-based survey of known sites, they are *not* based on an active programme of fieldwork to identify the full extent of archaeological sites in a county, that is the role of archaeological inventory and full survey. By the end of 1992 SMRs were available for all twenty six counties in the Republic. Marked up sets of six-inch Ordnance Survey maps showing the location of sites, with accompanying check lists will have been circulated to county planning offices and development agencies, such as the Forest Service and Coillte. The purpose of the SMRs is primarily to monitor the impact of developments, including forestry, on the archaeological heritage of the country. It should be emphasised that, contrary to the impression that a reader might gain from the *Forestry and Archaeology Guidelines* (Anon., 1991b), they do not in any way represent a full archaeological survey but only the first step in the compilation of such a survey which *must* be based on fieldwork as well as an analysis of existing documentation.

Measuring the Impact of Afforestation – The Present Situation

The reason why the basis of the SMRs has been outlined in some detail is because they are so central to the process whereby the Forest Service measures the nature and extent of the impact of a proposed planting programme on the archaeological resource. It is the central thesis of this paper that the SMRs by themselves, without active field-based mitigation measures, are an inadequate baseline to utilise in quantifying the impact of specific afforestation projects on the archaeological resource. The procedure at present is that on the receipt of an application for a private afforestation development Forest Service Inspectors will check the proposed planting site against the relevant SMR maps and lists of sites specifically protected as National or Registered Monuments under the National Monuments Acts 1930 to 1987. It should be noted that National or Registered Monuments form a very small percentage, less than 2.5%, of the estimated national total figure of monuments in the Republic (Cooney 1992). The reality that other sites not previously recorded will be present in the field is implicitly recognised in the *Guidelines on Forestry and Archaeology* which includes the aspiration that Forest Service Inspectors will be trained to recognise such sites.

If an archaeological site is present then maps of the proposed afforestation are forwarded to the Office of Public Works for comment within one month. Assessment within the Office of Public Works is dealt with, on a part-time basis, by one administrator and one archaeologist who may be dealing with

up to twenty applications a week. The assessment is largely office-based, again based on the SMRs. This is not surprising given the time constraint of a month and the totally inadequate resources within the Office of Public Works given to carrying out field monitoring. If a site is of archaeological importance then it will be registered, with no planting allowed with a 10-20 metre or occasionally larger zone around it, or planting will be permitted provided an excavation is undertaken by an archaeologist or where the site is only of possible interest pre-planting work may proceed provided particular care is taken. There is no requirement for field assessment by a trained archaeologist at any stage in this procedure. Where there are recognised sites of archaeological importance grant approvals will preclude planting of the sites, will include buffer zones and access routes and they will be protected at all stages of forest development such as road building and felling operations.

In relation to public afforestation Coillte send copies of land acquisition maps on a monthly basis to the Office of Public Works for comments and it has an education programme for staff to help them identify archaeological sites in the field. Otherwise the procedures operate as detailed above for private afforestation.

Identifying the Inadequacies of the Present Procedure

An analysis of this present set of procedures for identifying and mitigating the impact of afforestation on archaeology would firstly have to recognise that planting is concentrated in areas where the SMRs are least reliable. Uplands, areas of marginal mineral soils, blanket and cut-over raised bog are all zones where there has been very good survival of archaeological sites. The marginality of these areas for agriculture which makes many of them commercially attractive for forestry is the reason why they are such important zones of survival of archaeological sites of many different periods. Furthermore their physical remoteness and difficulty of access has meant that the archaeological sites have not been very well documented. In parts of counties such as Galway, Leitrim and Mayo as few as 5% of known archaeological sites were marked on the six-inch Ordnance Survey Maps. As Moore (1992, p. 226) has pointed out even when a field survey is carried out it tends to focus on areas where there are known monuments and so the bias against the documentation and survey of upland and marginal land will be carried on into fieldwork. So, on the one hand unimproved land is the last refuge of well-preserved archaeological landscapes, on the other hand many of these areas remain unsurveyed (Shepherd 1992, p. 162). In blanket bogs, raised bogs and areas of peaty mineral soils most of the archaeological sites may not appear on the surface but as sub-surface features. Ground preparation for afforestation by ploughing or ripping, tree-root growth and the process of tree harvesting and extraction will remove or substantially damage such features. Operations associated with forestry such as the

construction of access roads and the drainage of areas to be planted can lead directly and indirectly to further damage to archaeological sites.

The corollary of the above is that many archaeological sites in these vitally important areas for our understanding of the evolution of settlement in the landscape will not have made it into the county SMRs which are office-based surveys. Recognition of sites on the ground in this kind of terrain is a specialised archaeological skill, developed out of a suitable professional qualification and long experience in the field. To suggest that Forest Service Inspectors or Coillte foresters will be able to adequately assess the presence and diversity of sites in these areas is to engage in an act of faith similar to believing that an archaeologist could be entrusted to not only identify different species of conifer but also to predict their growth rates in different conditions and to manage a forest. Field assessment by professional archaeologists is needed as part of the monitoring procedure, otherwise that procedure in many cases amounts to nothing more than a token gesture towards protection of the archaeological resource.

In Scotland the Woodland Grant Scheme of 1989 and its revision in 1991 stipulate that sites considered important by archaeologists, usually the Regional Archaeologist, will not be damaged. In 1989 The Royal Commission on the Ancient and Historical Monuments of Scotland set up a survey unit, the Afforestation Land Survey, to work in areas prior to afforestation and Historic Buildings and Monuments, Scotland (Historic Scotland) have also made funds available for rapid field assessments related to specific grant applications (see Halliday and Ritchie 1992; Shepherd 1992). Given the scale of on-going afforestation in Ireland, similar to that in Scotland, an active field-based policy of assessment needs to be put into operation here by the relevant authorities if we are serious about managing the archaeological resource in afforestation areas.

Of course it is not realistic to suggest or expect that all archaeological features in the landscape should be preserved. The aim as Macinnes (1990) has recently stated is to preserve as much as possible, where land-use and development is not in conflict with preservation or can be adjusted to avoid conflict. If sites have to be damaged or destroyed then as a minimum they should be surveyed and recorded and where deemed necessary excavated.

At the moment in Ireland the only grant-aided afforestation projects subject to a mandatory pre-planting field-based assessment are new forestry developments over 200 hectares. These require an Environmental Impact Assessment (EIA) to be carried out under EC Directive 85/337. Given that the average size of plot being afforested at the moment is 10 hectares (Anon., 1991a, 33) it is clear that a very small proportion of grant applications for private planting or planting projects by Coillte now or in the future will require an EIA.

A recent preliminary survey by the Irish Association of Professional Archaeologists demonstrated the reality that afforestation has had a direct

detrimental impact on the archaeological heritage in many areas. While much of the damage to archaeological sites is done at the ploughing and planting stage it is worth repeating that the whole forestry process, from initial ploughing and planting through growth, thinning and felling has a potentially damaging impact. Afforestation can also affect archaeological sites indirectly, for example drainage of wetland areas may cause loss through desiccation of well-preserved deposits which may lie outside the area being planted. In the past as today the location of settlement and other types of sites was an important decision. Many different types of sites were located very specifically in relation to other sites or to overlook an area. This wider landscape setting of a site can often be lost as the result of insensitive planting.

Much of the forestry estate in Ireland today was planted between the 1930s and 1970s when there was much less sensitivity in the forest industry to environmental protection. This means that in many planted areas there are many known archaeological sites that are not protected in any way, with trees planted on or in the immediate vicinity of the site and sites at potential risk, particularly at the felling stage. There is no procedure at present to safeguard these sites. So it is not only at the stage of vetting planting applications but right through the forestry process and in already established forests that a more proactive approach needs to be taken to safeguard archaeological sites and monuments. As a State company managing an estate of over 485,000 hectares or approximately 6% of the national land area, making it the country's largest land-owner and a major custodian of archaeological sites, Coillte has a special responsibility in this area. The Forest Service vets grant applications for private afforestation projects. This mechanism could be used much more effectively to ensure field assessment in areas considered sensitive by the Office of Public Works. But it is only when there is a realisation of the wealth and importance of archaeological sites and landscapes in afforestable areas that a change in perspective will come.

The Wider Perspective

The importance of a more active policy of monitoring the impact of afforestation on the archaeological heritage lies not only in preserving and studying the historical dimension of the landscape but in presenting it as a major present-day resource. In the development objectives and strategy of the *Forestry Operational Programme 1989-93* one of the aims of the forestry programme being widely dispersed in rural areas is to underpin rural development, tourist development and recreation and preservation and improvement of wildlife and the environment. Understanding and presenting the development of the cultural landscape through archaeological monuments could be the key element of a strategy to develop rural tourism as a viable complementary enterprise to forestry and

farming (e.g. Feehan 1992). Bord Failte research shows that in 1990/91 visits to archaeological and historical sites featured in the holidays of 1.3 million overseas tourists. For 150,000 people it was the main reason that brought them to Ireland. Over 40% of the European Regional Development Funding grant aid was allocated to the 'history and culture' product under the *Operational Programme for Tourism 1989-93*. Every parish in the country has the potential to present its physical and cultural heritage as something worth coming to see, stay and appreciate. In turn such a strategy would also lead to more community awareness and understanding of the importance of the past of people's own place. As stated above many of the best-preserved archaeological site complexes and landscapes are in areas potentially attractive for afforestation, already planted or under consideration for forestry. Given the importance of these areas it is a priority to ensure that some accommodation can be reached whereby they would be maintained as integral landscapes.

Studies of the development of the Irish landscape over the last 10,000 years make it clear that the first substantial human impact on what was a predominantly forested landscape only took place from about 4,000 BC with the beginnings of agriculture. The island had already been occupied by hunter-gatherers for over 3,000 years and long after farming was established substantial parts of the landscape were forest-covered (e.g. Mitchell 1987). Thus a woodland setting, even of non-native conifers, may be more appropriate as a landscape background to many prehistoric monuments in trying to interpret the way they were perceived and used by people. This kind of approach requires that the archaeological heritage and forestry are seen not as conflicting land uses but as complementary resources to be developed in tandem. One example could be the recently discovered complex of hillforts of later prehistoric date near Baltinglass, Co. Wicklow (Condit 1992). Here selective clearance of planted areas would enhance the integrity of these hilltop sites and also serve to highlight their presence in the landscape. An interesting note to end on is to speculate how the balance between these two resources; archaeology and forestry, would be viewed if even half of the level of grant aid afforded to forest planting in both the public and private sector was given to the protection, preservation and presentation of suitable archaeological sites, complexes and landscapes in rural areas of Ireland.

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