



THEME 3

Legal Framework and Policy Development

THE LEGISLATIVE FRAMEWORK PROTECTING IRELAND'S NATIVE WOODLANDS

Dr. Janice L. Fuller, Ecological Consultant
Ballyshea, Craughwell
Co. Galway, Ireland
E-mail: JaniceFuller@eircom.net
Tel.: (091) 846815; (086) 3476891

NB. This paper is only a guide to legislation relating to the protection of Ireland's native woodlands. It does not purport to be a legal document (ed).

KEYWORDS: Legislation, native woodlands, Natural Heritage Area, Special Area of Conservation, Nature Reserve

Abstract

The principal pieces of National and European legislation that afford protection to Ireland's native woodlands are reviewed. These include the Wildlife Act 1976, the Wildlife (Amendment) Act 2000, the European Union Habitats Directive 1992 (transposed into Irish law under the European Union (Natural Habitats) Regulations, S.I. 94/1997) and the Planning and Development Act 2000. In addition, the Environmental Impact Directive 1997 has some relevance under the planning acts. Further, Ireland ratified the Convention on Biological Diversity in 1996, a binding international treaty. The protected status of Ireland's native woodlands in relation to this legislation is discussed.

The main mechanism for protecting native woodlands in Ireland is nature conservation designation. The main designations include Natural Heritage Areas (NHA), Special Areas of Conservation (SAC), National Parks and National Nature Reserves. Most woodland NHAs, however, do not have full legal status to date. One of the main obligations of the Convention on Biological Diversity is the development of a National Biodiversity Plan. A plan for Ireland was published in 2002 and it contains several actions that relate to woodland conservation including the establishment of a Native Woodland Scheme and a national survey of native woodlands. The Forestry Act 1946, which regulates the felling of trees, and Tree Preservation Orders are two other mechanisms for protecting trees and woodlands. Finally, Local Authorities have responsibilities in relation to nature conservation; the most important of which is controlling development within designated sites through the planning system.

There is a range of legislative mechanisms that can be used to protect woodlands. Legislation is of little value, however, if adequate resources for monitoring of sites and enforcement are not available and if the backing of sound conservation policies at a national and local level is absent.

Introduction

In order to protect our natural heritage, including habitats of conservation value, it is important to have comprehensive and effective nature conservation and planning legislation. For legislation to be effective it is essential that sufficient resources are invested in the relevant bodies for monitoring and management of sites and enforcement. An overview of the main relevant European and National legislation, in addition to the international treaties, that afford protection to native woodlands, is provided below. This paper does not provide a full statement of the law but is the interpretation of the author (who is not a legal expert). The legislation discussed generally relates to woodlands of conservation, landscape and amenity value, as well as native woodlands.

Nature conservation designations

The main mechanism for protecting native woodlands in Ireland is nature conservation designation. There are several designations, mostly governed by legislation (Table 1), which can be used to protect woodlands of conservation value. The most important national nature conservation legislation is the Wildlife Act (1976), amended by the Wildlife (Amendment) Act (2000). The European Union Habitats Directive (transposed into Irish law under the European Union (Natural Habitats) Regulations, S.I. 94/1997) has also had a major impact on the conservation of species and habitats in Ireland. Protection mechanisms generally apply to proposed sites as well as designated ones. Protection requires the regulation of development within a protected site and also outside a site if the development is likely to have a significant impact (Anon., 2003). The main conservation designations are discussed below:

Table 1. Summary of the legislation discussed that has implications for the protection or conservation of native woodlands in Ireland.

Legislation	Role in relation to woodland protection
Wildlife Act (1976)	Designation of Nature Reserves; Flora Protection Order
Wildlife (Amendment) Act 2000	Provides mechanism for the statutory protection of Natural Heritage Areas; Recognises Ireland's responsibilities in relation to the Convention on Biological Diversity
European Union (Natural Habitats) Regulations	Designation of Special Areas of Conservation
Planning and Development Act 2000	Tree Preservation Orders; role and content of County Development Plans
Forestry Act 1946	Felling Licences
Convention on Biological Diversity	Development of National Biodiversity Plan
Environment Impact Assessment Directive	Provides mechanism for assessment of the environmental impact of developments.

1. Natural Heritage Areas

Natural Heritage Area (NHA) is a relatively new national designation that forms the basis of the system protecting Irish natural habitats (Hickie 1996). Most NHAs were formerly Areas of Scientific Interest (ASIs), which had no legal protection. One of the main aims of the Wildlife (Amendment) Act 2000 was to provide a mechanism to give statutory protection to NHAs. Approximately 632 NHAs contain woodland of some description (including woodland dominated by non-native species) (Higgins *et al.*, 2004). Only peatland NHAs have full statutory protection to date and most woodland NHAs must be resurveyed and the landowners notified before they are statutorily protected (i.e. the are currently proposed NHAs). (See also 'Planning control').

Considerable additional resources will have to be allocated to the National Parks and Wildlife Service in order to monitor the extensive NHA network effectively. Further, if these sites are to be protected it is important that the Wildlife (Amendment) Act 2000 is enforced where breaches of the legislation occur.

2. Statutory Nature Reserves

The main piece of wildlife legislation in Ireland, the Wildlife Act 1976, empowers designation of sites as National Nature Reserves. 33 of the 78 nature reserves in the country are woodlands or contain important woodland stands (Figure 1) (Hickie, 1996). Generally, nature reserves receive a high level of protection, as they are mostly State-owned. Most were established in the 1980s and early 1990s. It could be argued that more nature reserves should be established due to the high level of protection they enjoy and yet the area of land designated is very small (Table 2). In addition, there are large gaps in the nationwide coverage. According to the legislation, there is an obligation to manage the land designated as nature reserves in accordance with the objectives for which it is designated. In general, nature reserves appear to be poorly resourced with little monitoring or active management.

3. National Parks

National Parks are not specifically governed by legislation (although a National Parks Bill is under consideration; national parks are managed under a number of Acts including the State Property Act 1954) but they are very important in terms of conserving large tracts of land with habitats of conservation value. The main aims of National Parks are nature conservation and public recreation (Hickie, 1996). They are all State-owned and therefore enjoy a high level of protection. Four of the six National Parks (Figure 1) contain extensive areas of native woodland, including Killarney National Park, which contains the largest area of semi-natural woodland in the country (1380ha). The National Parks in Ireland, however, are relatively small by European standards (Hickie, 1996).

4. Special Areas of Conservation

Special Areas of Conservation (SAC) are sites of particularly high conservation value and considered to be important in a European, as well as an Irish context. The legal basis for selecting and designating SACs is the European Union Habitats Directive, transposed into Irish Law under the European Union (Natural Habitats) Regulations 1997 (National Parks and Wildlife Service website). The Directive lists certain habitats (Annex I) that must be protected within SACs. Annex I habitats found in Ireland include raised bogs, blanket bogs, turloughs and certain woodland types (Table 2). However, oak-ash-hazel woodland, a common woodland habitat in Ireland is not included on the Annex I list. Species that must be afforded protection are listed on Annex II of the directive. There are a number of priority habitats and species that are considered to deserve special attention and they enjoy a stricter level of protection.

The Habitats Directive seeks to establish a network of protected areas, both SACs and Special Protection Areas (designated to protect wild birds), throughout the European Community. This network is referred to as Natura 2000. Landowners are notified of proposed SAC designation and they can appeal designation of their land, but only on scientific grounds. Landowners are compensated for actual loss of income arising from designation. A list of "Notifiable Actions" for different habitats is sent to landowners and users. Actions on the list can be carried out only with prior agreement of the Minister. Notifiable actions for woodlands include activities such as tree felling or grazing of livestock. A person who illegally damages a site may be prosecuted or required to repair damage.

The Habitats Directive requires Ireland to introduce controls over any developments likely to damage SACs. The Local Authorities have an important role in this regard and this will be discussed later under Planning Control.

Table 2. The Habitats Directive provides protection for 5 woodland types (listed on Annex I), all but one (marked with an asterisk) of which are priority habitats.

Old Sessile Oak Woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles (Code 91a0)*
Bog Woodland (Code 91d0)
Alluvial Forest (Code 91e0)
<i>Taxus baccata</i> Woods of the British Isles (Code 9580)
Hazel-ash scrub on limestone pavement (Code 8240)

Area of native woodland with some level of protection

The total area of woodland designated within proposed NHAs in Ireland was estimated to be 30,252ha (Higgins, 1999) including semi-natural and mixed woodland and scrub. 5,000ha of this total is commercial forestry. The breakdown of woodland area protected within the various designations is provided in Table 2. The area of native woodland in Ireland, based on the Forest Service GIS database has been calculated at 87,298ha (Martin *et al.*, this vol). This is a very low proportion of the total land area. The proportion of Ireland's native or at least semi-natural woodlands protected within the NHA network is therefore c. 29%.

It should be re-emphasised, however, that most of the proposed woodland NHAs do not yet have full legal status and only Nature Reserves, National Parks and SACs have statutory protection to date. The area of native woodland within National Parks and Nature Reserves, both of which enjoy a relatively high level of protection, is very small (c. 4,000ha). In practice the level of protection afforded to SACs (which cover the largest area) is unclear but in many cases there appears to be little active management. The quality of some sites may deteriorate without active intervention.

Table 3. Area of woodland designated for nature conservation in Ireland (not including 5000ha commercial forestry).

Designation	Area (ha)
National Nature Reserves	2,335*
National Parks	1,734*
Special Areas of Conservation	15,179.9**
Proposed NHAs (overlaps all other designations)	25,191 Total***

*John Cross pers. comm.

**Higgins *et al.* 2004

***Higgins 1999

Other legislation that relates to native woodland protection

1. Planning control

Under the planning legislation (including the Planning and Development Act 2000), Local Authorities have a responsibility to determine policy through their Development Plan and to apply that policy through planning control. Development Plans must include objectives for the conservation of the natural heritage and for the conservation of SACs and other designated sites (National Parks and Wildlife Service website). Under the Environmental Impact Assessment Directive a comprehensive assessment must be made of projects likely to

have significant effects on the environment. Where a proposed development might have a significant effect in relation to nature conservation the Planning Authorities are required to notify the Minister for the Environment. This relates to applications inside, or within 300m of, an SAC, candidate SAC, NHA, proposed NHA, nature reserve, national park and a site of a listed rare plant, among others. Permission for damaging developments in priority habitats may only be given for overriding reasons of public health and safety. Permission for damaging developments in non-priority habitats may only be given for imperative reasons of overriding public interest.

It is essential that there is effective communication between Local Authorities and the National Parks and Wildlife Service to ensure that designated areas are not damaged by development. Some concern has been expressed by the Irish Wildlife Trust (based on a study of planning applications in several counties over a period from 1995 to 1999) that not all planning applications within SACs were referred to the National Parks and Wildlife Service, and that they did not comment on all submitted planning applications (Clerkin & Flynn, 1999).

2. Felling licences

Most trees and forests are afforded some protection by the Forestry Act 1946. A Felling Licence is required for the felling of all trees greater than 10 years of age, although there are several exceptions (Maguire, 2001). Ecological considerations are generally not taken into account when issuing Felling Licences unless the site is designated for conservation, in which case staff of the National Parks and Wildlife Service may be consulted. Trees and woods outside of designated areas or in urban settings are, therefore, vulnerable.

3. Tree Preservation Orders

A Tree Preservation Order (TPO) is another legal mechanism for protecting trees. Local Authorities have discretionary powers to establish TPOs. They can be made for trees and woodlands considered to be of special amenity value and not solely on the basis of ecological value (Hickie, 1996). A tree with a TPO cannot be felled unless the owner applies for and receives planning permission. The number of TPOs in the country is low: some counties have none while County Wicklow has by far the most (Hickie, 1996). A TPO is generally considered to be of limited practical use in protecting trees and woodlands in situations where they are under threat. In the well-publicised case of Tomnafinnogue Wood, Coolattin, Co. Wicklow, the TPO covering this large mature oak-wood only delayed the felling programme, which was eventually licensed by the Forest Service (Hickie, 1996). Despite changes in the planning legislation, TPOs still do not provide absolute protection and only bring trees or woods under planning control. Local Authorities have other powers to designate areas for amenity or conservation (which may include wooded areas) but they are rarely used (e.g. Special Amenity or Landscape Conservation Orders).

4. Flora protection order

The Flora (Protection) Order, 1999 (which supercedes orders made in 1980 and 1987) lists rare plant species protected under Section 21 the Wildlife Act, 1976. It is illegal to disturb or remove the listed species. This protection applies wherever the plants are found and is not confined to sites designated for nature conservation. Some of the rare species listed are found in woodland habitats including narrow-leaved helleborine (*Cephalanthera longifolia*), hairy St. John's wort (*Hypericum hirsutum*) and starved wood sedge (*Carex depauperata*). Sites can be afforded protection from development on the basis of the presence of listed species.

Convention on Biological Diversity

The Convention on Biological Diversity (CBD), which was a product of the United Nations Conference on Environment and Development in Rio de Janeiro 1992, had a significant impact on nature conservation policies and legislation in Ireland and the European Union (EU). The convention was signed and ratified both by the EU and Ireland (Anon., 2002). By ratifying a Convention, a State agrees to be bound by the Convention (Anon., 2002). The Wildlife (Amendment) Act 2000 gives specific recognition to the Minister's responsibilities in regard to promoting the conservation of biological diversity, in the context of Ireland's commitment to the CDB (Anon., 2002).

The CBD requires contracting parties to take measures for the conservation and sustainable use of biological diversity in their home territories (Anon., 2002). One of the main obligations is to develop a National Biodiversity Plan.

Ireland's National Biodiversity Plan was published in 2002 and covers the 5-year period 2002-2006. The Plan focuses in detail on the measures required for the conservation and sustainable use of biological diversity to be taken by all the relevant sectors. Several of the measures listed relate to nature conservation in general and others directly impact on native woodland conservation and expansion. For example, one action proposed in relation to legislation is to "review continuously the adequacy of wildlife legislation in furthering the objectives of strategies for biodiversity" (Anon., 2002). According to the Plan, all new and existing legislation should incorporate provisions for the conservation of natural diversity. Another action listed requires each "Local Authority to prepare a Local Biodiversity Action Plan in consultation with relevant stakeholders" (Anon., 2002). Clare County Council has led the way in this regard by employing a Biodiversity Officer to develop a plan for Co. Clare.

There are 14 actions relating to forests in the National Biodiversity Plan of which three are specifically aimed at native woodlands. All three are being implemented.

- 1 To introduce a Native Woodland Scheme which aims to protect and enhance existing native woodlands, and to encourage the development of new native woodlands. This Scheme is up and running and, despite some funding problems, is a practical mechanism for protecting and increasing Ireland's native woodland resource.
- 2 To encourage the planting and management of 600 hectares (ha) of native Irish broadleaf trees in conjunction with the People's Millennium Forests. Over 600 ha of native Irish woodland have been designated as 16 'People's Millennium Forests'. The forests include newly planted areas and old native woodlands that are being restored.
- 3 To develop a classification system and undertake an inventory of broadleaved woodlands in Ireland. Such a national survey is currently being undertaken by the National Parks and Wildlife Service. This action is essential to provide information on the extent of the existing resource in order to effectively manage it and to develop appropriate conservation policies (Higgins *et al.*, 2004).

The National Biodiversity Plan is a positive contribution to nature conservation policy in Ireland and it clearly demonstrates the cross-sectoral approach that is required for conservation of biological diversity. It provides a detailed list of broad-ranging measures and actions to be taken, and, as described above, those relating to native woodlands are all underway. It is not clear, however, how progress in implementing the plan will be measured as few timescales or concrete targets to be achieved are provided.

Conclusions

There are several legislative mechanisms that can be used to protect woodlands in Ireland. Legislation is of little value, however, without the availability of sufficient resources within the relevant bodies. Resources are required for land acquisition, protection and management of designated sites, compensation for landowners where appropriate, and enforcement of the law. The backing of a sound conservation policy framework at national and local levels is also essential.

A relatively small proportion of our native woodlands are designated for conservation (including the proposed NHAs) considering that native woodlands are a relatively rare habitat, which are under threat not only from development but also from overgrazing and invasion by non-native species. Despite the presence of management plans for SACs, there appears to be little active management of most designated sites apart from a few Nature Reserves and National Parks. Management is essential for many semi-natural habitats in Ireland, including woodlands.

Trees and woodlands that are not legally protected are vulnerable to being destroyed as they have little legal protection. TPOs have not proven to be particularly effective in protecting trees or woods and forestry legislation regulating tree felling does not consider the ecological value of trees or woods to be felled, and generally does not apply in urban districts.

Local authorities have an important role to play in protecting Ireland's natural heritage. County development plans must have a comprehensive nature conservation policy that is an integral part of the plan. In order to have appropriate planning control within designated sites, effective communication with the National Parks and Wildlife Service is essential. Development within designated sites must be monitored closely and planning conditions enforced.

Acknowledgements

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National Parks and Wildlife Service www.npws.ie



Figure 1: Location of Nature Reserves and National Parks that contain woodland of conservation value (Adapted from Hickie 1996).

THE ROLE OF ENGOs IN PROMOTING THE DEVELOPMENT OF NATIVE WOODLAND POLICY, CREATING AWARENESS AND INSTIGATING CHANGE

Míde Gerrard, Chairperson of the Natural Environment Committee
An Taisce, The National Trust for Ireland
Lesseragh, Coolbawn, Neneagh
Co Tipperary
Tel: 067-28008 / 087-7800144
Email: midgerrard@eircom.net

An Taisce - the National Trust for Ireland, was established over 50 years ago and is the broadest environmental non-governmental organisation in Ireland. An Taisce has been a statutory consultee under the Planning Acts since 1963. Since then, other consultative responsibilities have been added to our remit, including commenting on Integrated Pollution Control Licence, Waste Licences, aquaculture licences and most recently forestry consent applications.

This paper will examine An Taisce's response to the development of the Native Woodland Scheme since its inception, and will consider some aspects of the new forestry regulatory regime as introduced on the 10th December 2001 by the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 2001.

This legislation removed initial afforestation from the planning acts, and initial afforestation is now 'exempt' from planning permission requirements. A new forestry consent procedure, governed by the Minister for Agriculture and Food, allows for public participation in the consent process through a system of public notification, via local newspapers with a period for comment. Provision has also been made for consultation with specific bodies including the National Parks and Wildlife Service, the Heritage Council and An Taisce - the National Trust for Ireland.

The new regulations lower the thresholds for mandatory Environmental Impact Assessment from 70 to 50 hectares. Provision for requiring an EIA below the threshold has also been included where there may be significant environmental impacts.

An Taisce, is a statutory consultee under the new Regulations. The paper will compare the legislation's effectiveness in implementing elements of the National Forest Standard and Code of Best Forest Practice, both of which have been developed in order to implement sustainable forest management principles in Ireland.

Introduction

This paper outlines the role of Environmental Non-Governmental Organisations (ENGOs) in promoting the development of native woodland policy in Ireland, creating awareness and instigating change in the forestry sector. When examining recent advances in the native woodland sector the following questions are pertinent:

- Has there been a role for ENGOs in promoting the development of woodland policy?
and
- Have ENGOs had a role in creating awareness and instigating change?

The theme of the Native Woodland Conference is the past, present and future of Ireland's Native Woodlands. This paper concerns policy development, including policy development aspects of the Native Woodland Scheme, and some aspects of the new Forest regulatory regime under the Environmental Impact Assessment (Amendment) Regulations 2001.

Since 1963, An Taisce has been a statutory consultee under the Planning Acts. As well as waste licences, IPC licences, and aquaculture licences, An Taisce are now consulted on forestry consent applications.

An Taisce has been involved, as a committee member, with the Irish Forestry Certification Initiative, Woodlands of Ireland, The Peoples Millennium Forests, The Tree Council of Ireland and has made submissions to the Forest Service on Ireland's National Forest Standard. An Taisce was a member of the plenary committee and made submissions to the earlier document 'Growing for the Future'. The Project Unit within An Taisce runs the Leaf programme. Learning about Forests (LEAF) is an international programme that aims to encourage schools, classes and teachers to use forests for educational activities.

ENGOS in Ireland

ENGOS are in the main, a small, fragmented, weak, and financially under resourced sector in the wider framework of woodland policy. Considering their current marginalised position in Irish society, it is worth looking at the environmental movement's main ENGOS with forestry in their brief.

The following listing is not in order of importance:

- 1 An Taisce,
- 2 The Woodland Trust (Northern Ireland)
- 3 Crann
- 4 Voice
- 5 The Tree Council of Ireland (TCI)
- 6 The Irish Wildlife Trust
- 7 Muintir na Coille - Coppice association of Ireland
- 8 Birdwatch Ireland
- 9 Irish Peatland Conservation Council (IPCC)
- 10 Keep Ireland Open
- 11 Networks for Nature (NfN)
- 12 The Woodland League
- 13 Forest Friends
- 14 Conservation Volunteers Ireland (CVI)
- 15 Just Forests
- 16 Irish Coalition for Sustainable Forestry
- 17 Irish Seed Savers Association
- 18 People against Pesticides (PaP)
- 19 The Woodlands of Ireland Group (Wol)
- 20 Friends of the Irish Environment (FIE)
- 21 Earthwatch -Friends of the Earth Ireland
- 22 Feasta

Other groups are associated with specific local forestry issues, such as the Mote Conservation group and of course some individuals and consultants have been influential both in the past and the present.

Some of the 22 named ENGOS function with working volunteers; some have retired from the fray, but they all have had their place in the development of Irish woodlands policy. But how have they influenced policy?

One person, whose influence was dramatically important, and who used her influence and knowledge for the benefit of Woodlands in Ireland, in particular, was Freda Rountree, former Chairperson of Crann and the Heritage Council. More than any one else, her achievements should not be forgotten. She seized the opportunity presented by the celebration of the new Millennium to become a driving force behind a project on native woodlands that would bring the issue of native woodland conservation to every household in Ireland. She worked diligently to promote the establishment of the Woodlands of Ireland Group and the Peoples Millennium Forests.

'The People's Millennium Forests' is the title given to a project to restore and create native woodlands that was initiated in the year 2000 to celebrate the start of the third Millennium. The purpose of the project is to ensure that all generations, present and future, can enjoy the benefits of Ireland's native forests. The project is sponsored by AIB Bank plc and the Irish Government and is managed by Coillte Teoranta in partnership with Woodlands of Ireland. The Woodlands of Ireland group represents statutory and non-Governmental organisations actively involved in promoting native forests.

Freda galvanised people, the Heritage Council, the agencies, the Government Departments and the result has been a measurable improvement in the protection, promotion and establishment of native Irish woodlands.

Irish Forestry

Forest cover in Ireland extends to some 660,000 ha - almost 10% of the country's land surface. Plantations comprise by far the largest part of the forest area, i.e. more than 95%. Forestry is a relatively recent land use in Ireland. The high percentage of exotic tree species in commercial plantations presents a serious challenge to sustainable forest management in Ireland.

A key component of Ireland's current forest policy is to encourage farmers to afforest agricultural land, at a rate of 20,000 ha per annum to achieve a forest area of 1.2 million ha or 17% of the land area by 2030. Government grants and annual tax-free premiums are the primary instruments used to encourage this policy. The overall aim is to reduce surplus agricultural production in the EU. At the same time this policy will support rural development by ensuring a source of income to the sector. This policy can be found in the National Development Plan 2000 -2006.

Problems have arisen in so far as farmers have responded by planting mostly poor, unproductive land. Up to two thirds of the land planted had some deficiency, either a physical or nutritional limit, which was overcome by site preparation and/or the application of fertiliser. Forestry is also by its nature, an activity, which presents particular difficulties in the area of funding. Typical minimum periods of rotation mean that the period between investment in the establishment and critical early management of plantations and the generation of a return on that investment, is very long relative to most areas of economic investment and thereby constitutes a disincentive to investment (Bacon 2004).

Where market forces are driving policy on forestry, ENGOs, which by their very nature are outside the market, can have very little influence on policies as outlined previously. Most volunteers in the sector realise this, yet with the blind enthusiasm of the deeply committed, they have continued to work and lobby about the importance of native woodland habitats, the threats to their existence, the EU regulatory system, biodiversity, and the risks inherent in a flawed cost/benefit analysis of the sector.

In April of this year Peter Bacon and Associates, economic consultants, carried out a consultation with everybody involved with the Forest sector (Bacon, 2004).

The terms of reference from the Department of Agriculture were

- 1 Review the operation of the existing strategic plan for Forestry in Ireland i.e. Growing for the Future
- 2 Look at the potential changes in land uses arising from the review of CAP and existing schemes.
- 3 Look at the nature and economic effects of the funding mechanisms, with a view to seeking the best value for money.
- 4 Review timber market developments; this will incorporate non-timber benefits of forestry and environmental requirements. Under this heading the consultants also considered carbon sequestration.

An ENGO approach to such a review might seek other values as well as those highlighted above. The values in sustainable forest management as laid down in the Irish National Forest Standard do not preclude value for money, but seek environmental integrity first. A dedicated unit within the Forest Service could be set up to protect the unprotected, the proposed Natural Heritage Areas (pNHAs), undesignated areas with biodiversity value, i.e. afforested heath vegetation, scrub, road corridors, green ways, small stands 3-5ha in size and birch regeneration on cut-away bog.

Policy is required to retain functioning flood plains and to protect unmanaged riparian/wet woodland. It is also urgently required in development plan policies to include full integration of a biodiversity framework for sustainable development, where there is a presumption against clearance of broad-leaved woodland for other land uses, the protection of ancient semi-natural woodland and for multiple use forestry. When developing policy, ask the question: 'what can offer the greatest environmental benefit?' A review of the non-timber benefits of forestry would highlight the value of conserving habitats, of protecting biodiversity, of planting the right tree in the right place and of the beauty to be found in a landscape that is appropriately planned and planted. Economic benefits would flow from this to communities both rural and urban. Special Areas of Conservation (SACs) under the EU Habitats Directive would be better understood, and management plans would now be in place.

The Department of Agriculture and Food stressed to Peter Bacon the need for *innovation* in the sector. Yet the Native Woodland scheme (NWS) - which is set to establish 15,000ha of new woodland and proposes another 15,000ha of existing woodland for restoration - was curtailed due a budget cut in 2003 and 2004. The NWS is certainly an innovative Scheme set against the background of a forest sector dominated by coniferous plantation forestry.

To quote Minister Hugh Byrne on the Scheme's launch: "This scheme is perhaps one of the most eagerly awaited in recent years. Native woodlands are among Ireland's most valuable habitats and today form an important part of our heritage, culture and landscape. The scheme will ensure that Irish forests continue to provide rich and varied habitats for native flora and fauna in addition to fulfilling important social, economic, recreational and landscape functions."

The NWS – a new, innovative and evolving package - represents a major step forward for the Irish forest industry in terms of securing the future of our threatened native woodland resource, implementing sustainable forest management and meeting Ireland's commitments under the EU Habitats Directive and the UN Convention on Biological Diversity. ENGOs are happy to participate in this process and help evolve this new way of working through partnership.

The process, which Bacon and Associates propose to use for their review of forest policy, is largely driven by economic considerations. The consultants stated that they wish to look forward and deal with current and emerging issues conceding that decision factors in forestry are complex. ENGOs feel sidelined and frustrated by this kind of process, which excludes them while simultaneously appears to consult with the widest range of bodies possible.

Conclusion

The BIOFOREST project is a large-scale five-year project, running from 2001 to 2005, with the aim of addressing some of the gaps that exist in the current information on biodiversity in Irish plantation forests. The project is funded through the National Development Plan by the Environmental Protection Agency (EPA) and the National Council for Forest Research and Development (COFORD) as part of the Environmental RTDI Programme 2000-2006.

As part of the BIOFOREST project, a review of existing practice in Ireland, in relation to biodiversity assessment of sites to be afforested, is being carried out. For this, the project is reviewing all the EISs, which have been submitted in relation to afforestation projects. There are only 9 such EISs in the ENFO collection.

During 2002, 280 afforestation applications were received for consultation by An Taisce and this year, a grant from the Heritage Council was received to carry out site audits of afforestation applications. The overall objective of this proposal is to undertake site visits, on randomly selected afforestation applications, in order to determine the impact of the afforestation on local heritage. The results will bolster the methodology already in place and allow An Taisce to fulfill its prescribed role for afforestation applications, using limited resources. The audit will examine adherence to the afforestation application and approval conditions issued

by the Forest Service, as well as adherence to the suite of Forest Service environmental guidelines. The information gleaned from this process, will be published, including data on how many afforestation applications received are equal to or greater than 50 hectares.

An Taisce requested details of applications submitted that are within SACs, and copies of decisions in relation to these applications. It is stated that all applications within SACs are refused, but access is refused to any information on these applications. The above paragraph needs to be clarified. Given that a public consultation and prescribed consultation procedure was introduced on 10th December 2001, An Taisce submits that a transparent system has been established by statute which should allow access to decisions made in relation to environmental planning i.e. afforestation and that article 13 of S.I. 538 provides for notifications to be formatted in a manner that would not divulge 'personal information'.

To conclude it is important to examine the original questions posed at the outset:

- Has there been a role for ENGOs in promoting the development of woodland policy?
and
- Have ENGOs had a role in creating awareness and instigating change?

The following quote from one ENGO sheds some light on existing attitudes. "Well, sure, but Government policy is a very powerful instrument and I don't see you rocking the boat by seeking a change in policy." The Forest Service actual broadleaf planting from their own database for the last two years is given as 15.3% and they are now telling Brussels that they are upping their target to 25%! This is a meaningless gesture – 15,000 new hectares over seven years – little more than 2,000 hectares a year, when the target will be 25% of 20,000 hectares or 5,000 hectares a year. Does this *woodland* planting come out of the 15.3% that was planted in the last two years? These are questions that need to be addressed.

The Native Woodland Conference, hosted by an ENGO, i.e. Woodlands of Ireland, has been an important step forward in raising awareness and encouraging communication between native woodland stakeholders. The conference has raised the profile of native woodland conservation in Ireland and illustrated that this is a high priority issue for a broad range of people.

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WOODLANDS OF IRELAND – COILLEARNACHA DÚCHASACHA ORIGINS, ACTIVITIES AND VISION FOR THE FUTURE

Cara Doyle, Project Co-ordinator, Woodlands of Ireland
Cabinteely House, The Park, Cabinteely, Dublin 18
Tel: 012849329 / 087 6685823
Email: woodsofireland@iol.ie

KEYWORDS: partnership, native woodland policy, People's Millennium Forests, Native Woodland Scheme, public awareness

Abstract

The Woodlands of Ireland Group was established in 1998 to represent all those with an interest in native woodlands, including foresters, ecologists, statutory bodies, ENGOs, contractors and the nursery sector. Woodlands of Ireland (Wol) is co-funded by the Forest Service (Department of Agriculture and Food), the Heritage Council and the National Parks and Wildlife Service (Department of the Environment, Heritage and Local Government).

Since its inception, Woodlands of Ireland has been at the forefront of native woodland conservation in Ireland through initiatives such as the People's Millennium Forest Project and the development of the Forest Service Native Woodland Scheme. Woodlands of Ireland continue to support the development of the scheme through the provision of training courses – in association with the Forest Service – aimed at foresters, ecologists, contractors and others directly involved in the scheme.

The Woodlands of Ireland Steering Group provides guidance and expertise on the overall management of the organisation. A Technical Advisory Group also provides technical advice and support on initiatives. This group have recently contributed to a set of Silvicultural Guidelines outlining management systems appropriate under the Native Woodland Scheme. The group has also made submissions to the National Roads Authority on the appropriate management of roadside verges and to the Department of Agriculture and Food on the review of REPS with regard to the management of semi-natural woodland on farms.

Woodlands of Ireland promote public awareness to highlight the importance of native woodlands as a valuable part of our natural heritage. It is highly appropriate that Ireland's first major conference on native woodlands took place during National Heritage Week 2004.

Introduction

Native woodland once covered most of the island of Ireland, yet today surviving fragments today comprise approximately 1% of the country's land area. Without active management and protection these valuable ecosystems will fast become a fading legacy. During the late 1990s, there was growing concern for the future of Ireland's few remaining semi natural woodlands. The late Freda Rountree, then Chairperson of the Heritage Council, and the Tree Council of Ireland, convened a meeting in Kilkenny in 1997 and invited a group of key native woodland stakeholders with a view to composing a major native woodland initiative to celebrate the new Millennium. A direct result of this meeting was the formation of Woodlands of Ireland in 1998, an organisation that would be dedicated to the protection, enhancement and expansion of Ireland's native woodlands with support from the Heritage Council, The Forest Service and the National Parks and Wildlife Service (then Dúchas).

Structure

The organisation normally employs one full time Project Manager. A Steering Group provides support and guidance on key initiatives and management of the organisation. This Steering Group represents a broad spectrum of interests and includes representatives of the Heritage Council, the Forest Service and the National Parks and Wildlife Service in addition to ENGOs, state bodies, foresters and ecologists. Steering Group meetings provide an open forum for discussion resulting in a focussed approach to native woodland conservation and management.

A Technical Advisory Group consisting of over 25 experts in various aspects of native woodland ecology, management and conservation, provide support on specific technical matters that arise. This recently included input to the development of a guide on the silviculture and economics involved in managing native woodland for wood production within the context of the Native Woodland Scheme. The publication entitled: *Realising Quality Wood from Ireland's Native Woodlands* will be published in the near future by Woodlands of Ireland.

The People's Millennium Forest Project

The prospect of the new Millennium in 2000 generated much interest and debate on how best to celebrate the occasion. At the time, the Government formed the National Millennium Committee (NMC) to identify and provide funding to worthwhile projects. The aim was to engage the general public and positively contribute to local community development. Woodlands of Ireland availed of this opportunity and proposed a project that would highlight the importance of native woodlands as a valuable component of our natural heritage. The People's Millennium Forests Project was to become the flagship of the NMC.

The scope of the proposal was beyond the capacity of Woodlands of Ireland, which had only one full time employee. The NMC agreed to support the project but recommended that a suitable partner be sought to effectively manage the initiative. Coillte Teoranta kindly agreed to become a partner and with the support of the NMC, AIB, and the Forest Service, 16 sites were carefully selected for native woodland restoration. A detailed description of the management of the project is covered in M. Doyle's paper 'Restoring native woodlands: The experience from the People's Millennium Forests Project' (this volume).

Although the People's Millennium Forests Project has largely been implemented, a number of long-term tasks are ongoing. These include a long-term monitoring project to assess woodland succession in four of the millennium woodlands and the development of a native woodland database under the auspices of the National Parks and Wildlife Service.

The Native Woodland Scheme

Following the People's Millennium Forest Project, the native woodland movement had gained momentum and was strengthened by increased public awareness. In 1999, Woodlands of Ireland submitted a proposal concerned with the grant-aiding of native woodland conservation and creation, to the Forest Service for consideration. The Native Woodland Scheme evolved as a direct result of this submission and was officially launched in 2001. This scheme - developed and implemented in partnership with Woodlands of Ireland, the National Parks and Wildlife Service, Regional Fisheries Boards and a host of other relevant bodies - offers grants and annual payments to landowners to conserve and enhance existing native woodland and to create new areas of native woodland. The scheme's scope and flexibility allow for a wide range of innovative approaches, such as the implementation of continuous cover forestry, the encouragement of natural regeneration, the conversion of non-native forest to native woodland status, the clearance of invasive species such as rhododendron, and the development of riparian native woodland corridors along our rivers and lakes. Perhaps the most exciting aspect of the scheme is that it offers a mechanism, after centuries of decline and neglect, to actually start increasing the area of native woodland cover in Ireland and to appropriately manage remaining woodlands.

The scheme also plays an important role in fulfilling our national and international obligations under the Wildlife Act (1976), the Wildlife (Amendment) Act (2000), the EU habitats directive and the United Nations Convention on Biological Diversity.

Woodlands of Ireland's Technical Advisory group worked closely with Forest Service staff to develop the grant scheme and to compile a Native Woodland Scheme manual. Wol are actively involved in the provision of Native Woodland Scheme training courses, which are ongoing. Details of the Native Woodland Scheme are comprehensively covered in K. Collins paper 'Funding a future for Ireland's native woodlands: The development and application of the Native Woodland Scheme' (this volume).

COST Action E27

COST is an intergovernmental framework for European Co-operation in the field of Scientific and Technical Research, allowing the co-ordination of nationally funded research on a European Level. COST Action E27 was established in 2002 to harmonise the wide range of protected forest area categories used in European countries within the context of existing international systems of protected areas. The main objective of this action is the improvement of information on protected forest areas in Europe, reporting mechanisms and harmonisation of key terms. Wol are members of this Action and regularly attend COST E27 management committee and working group meetings.

Roadside Planting - National Roads Authority

The National Roads Authority is currently developing a protocol for the management of roadside verges. Wol has provided technical advice on the ecologically sensitive management of roadside verges and the use of native tree and shrub species. Roadside plantings represent an opportunity to develop linear native woodlands across the country and to conserve our indigenous gene pool. Wol will closely monitor this project and continue to provide technical support as required.

Rural Environmental Protection Scheme

There is considerable scope for inputting to the management guidelines for woodlands on farms under the Rural Environmental Protection Scheme (REPS). Although Wol have attended consultation meetings with the Department of Agriculture and Food in May and June 2003 during the review of REPS and submitted a position paper on semi-natural woodlands on farms, a native woodland option has not yet been incorporated into REPS.

Irish Forestry Certification Initiative

The Irish Forestry Certification Initiative is a process that aims to:

- Advance sustainable forest management in Ireland
- Develop a certifiable forest management standard for Irish forests based upon the principles and criteria of The Forest Stewardship Council (FSC)
- Engage the general public and relevant interest groups in the development of the Irish FSC standard

Woodlands of Ireland was elected to the steering group of IFCI, on the social chamber in 1999. In the last year considerable progress has been made in the forest certification process. Declan Little of Woodlands of Ireland and currently Chairman of Irish Forestry Certification Initiative Ltd. (IFCI Ltd.), recently reported that virtually all 10 FSC Principles and associated criteria have been reviewed by the Technical Working Group, which is comprised of representatives from the 4 constituent chambers of IFCI Ltd. When the revised draft standard is completed it will be circulated for public consultation. IFCI Ltd. is a member-based organisation and members are affiliated to chambers according to member profile and chamber definition.

Public Relations

It is not the intention of Woodlands of Ireland to promote itself widely as there are numerous woodland-related organisations in the field. However, it is important to ensure that the forest and conservation agencies, in particular, are aware of our activities. Woodlands of Ireland regularly update native woodland stakeholders through its quarterly article in 'Crann magazine' and on the official website: www.woodlandsofireland.com. Information on native woodlands, Wol activities and upcoming events are posted on the website.

Conclusion

The success of the Native Woodland Conference in September 2004 represented a major initiative at raising awareness and highlighting the importance of conserving and expanding Ireland's native woodland resource. The fact that over 270 people attended the conference over four days is a clear indicator that the conservation of native woodlands is an issue that is high on the agenda of a broad range of interest groups. Over 30 lectures presented by the leading experts in native woodland conservation and management from Ireland, the UK and mainland Europe are presented in this publication.

One of the key areas to be addressed in future includes the development of riparian woodland management expertise and training courses. Although Ireland is in the nascent stages of native woodland conservation and establishment, current indicators point to a bright future. The 2005 budget for the Native Woodland Scheme will determine the work programme for the year ahead but a significant increase on last year's funding allocation is expected. The Native Woodland Scheme has evolved considerably since it was first launched in 2001 and is currently being reviewed within the Forest Service.

Woodlands of Ireland will continue to influence the development of native woodland policy; support the progression of the Native Woodland Scheme and identify other opportunities for native woodland restoration and establishment in Ireland.

Acknowledgements

Woodlands of Ireland wish to thank current and previous Project Managers including John O'Reilly, Declan Little and Cara Doyle and the members of the Steering and Technical Advisory Groups who have contributed to the organisation and its initiatives since its establishment in 1998. Wol is particularly grateful for the generous financial support of the Heritage Council, the National Parks and Wildlife Service (Department of the Environment, Heritage and Local Government) and the Forest Service (Department of Agriculture and Food). Woodlands of Ireland furthermore wish to convey our gratitude to all those who contributed to the success of the conference especially the organisational and editorial committees.

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NATIVE WOODLANDS AND THE USE OF NATIVE PROVENANCES

John Fennessy, Research Programme Manager, COFORD
The National Council for Forest Research and Development
Arena House, Arena Road
Sandyford, Dublin 18
Tel: 01 2130725
Fax: 01 2130611
Email: john.fennessy@coford.ie

KEYWORDS: native species; reproductive material; indigenous seed sources; biodiversity; provenance studies.

Abstract

Ireland has a very limited range of tree species despite having an ideal climate for tree growth. Forest cover, while once extensive, reached an all time low of approximately 1% at the start of the twentieth century. This was due to a number of factors including climate change, the development of agricultural practices and over-exploitation of the forests by man. Today, forest cover has increased to almost eleven percent of the land area, predominantly comprising exotic conifers. In recent times, however, there has been an increased interest in native species, which has resulted in the development of the Native Woodland Scheme. This scheme encourages the restoration of existing native woodlands and the planting of new woodlands.

A requirement of the Native Woodland Scheme is that all planting stock must originate from indigenous and heterogeneous sources within Ireland. Practical difficulties, however, arise in obtaining reproductive material of native species as substantial quantities have been imported from Europe and beyond for some time. Protecting and developing Ireland's source of native tree seed, in conjunction with the renewed interest in, and commitment to, native species, will ensure that this valuable natural resource will be conserved for future generations.

Introduction

Situated on the western extremity of the European mainland, Ireland's climate is strongly influenced by the North Atlantic Ocean, which gives the country a typical west maritime climate. The North Atlantic drift, moving northwards from the warm regions of the Caribbean, brings with it warm waters, warm winds, and ever-changing frontal systems and depressions to give mild damp winters and cool cloudy summers, with frequently varying daily climatic conditions. This type of climate with its absence of extremes is favourable to the growth of a wide range of crops (O'Carroll, 1984). In these conditions a great number of trees and shrub species from many parts of the world can be grown successfully.

Historical perspective

As the ice sheet retreated northwards at the end of the last glaciation period some 10,000 years ago, Ireland began to be colonised by species migrating from the continent. Ash and elm migrated across Britain into Ireland while oak, alder and pine are thought to have come across a land bridge from France. Beech and sycamore failed to reach this country before the land bridge disappeared; their presence here is as a result of importation. Between 5,000 and 7,500 years ago woodland probably covered about 80% of the land surface of Ireland. The distribution of tree species consisted of alder, ash, birch, elm, oak, as well as pine; minor species included hazel, holly, juniper, cherry, willow and yew. Towards the end of this period, Neolithic farmers began a limited clearance with minimal impact. During the Bronze Age (4,500-2,500 BP), agricultural pressure on the better soils became more widespread. At that time, the climate became wetter and cooler, with the result that peat bogs spread and many of the forests of pine, birch, oak and yew were suppressed.

Table 1. Native Irish tree species

Common name	Botanical name
Common alder	<i>Alnus glutinosa</i>
Strawberry tree	<i>Arbutus unedo</i>
Silver birch	<i>Betula pendula</i>
Downey birch	<i>Betula pubescens</i>
Hazel	<i>Corylus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Spindle	<i>Euonymus europaeus</i>
Ash	<i>Fraxinus excelsior</i>
Holly	<i>Ilex aquifolium</i>
Crab apple	<i>Malus sylvestris</i>
Aspen	<i>Populus tremula</i>
Wild cherry	<i>Prunus avium</i>
Bird cherry	<i>Prunus padus</i>
Blackthorn	<i>Prunus spinosa</i>
Sessile oak	<i>Quercus petraea</i>
Pedunculate oak	<i>Quercus robur</i>
Purging buckthorn	<i>Rhamnus catharticus</i>
White willow	<i>Salix alba</i> *
Sally	<i>Salix atrocinerea</i>
Goat willow	<i>Salix caprea</i>
Bay-leaved willow	<i>Salix pentandran</i>
Elder	<i>Sambucus nigra</i>
Rowan	<i>Sorbus aucuparia</i>
Whitebeam	<i>Sorbus hibernica</i>
Yew	<i>Taxus baccata</i>
Elm	<i>Ulmus glabra</i>

Source: Cross 1987

(* possibly introduced)

From the beginning of the Iron Age, about 2,500 BP, man began to contribute significantly to the destruction of forest cover. The popular belief that Ireland still had substantial areas of ancient oak forest at the beginning of the 17th century is subject to controversy. It is agreed, however, that they were heavily overexploited. The latter half of the 18th century saw an attempt to restore woodland cover. However by 1906 the estimated area of woodland had dwindled to about 100,000ha or 1.0% of the land area. Today, Ireland has approximately 685,000 ha of forest, representing almost 11% of the land area, with approximately 18% of this area made up of broadleaved woodland, much of it native species (Coggins, 2003)

Why use native species?

There are many reasons why native tree species should be favoured. They arrived here naturally after the most recent Ice Age and have adapted over many generations to the Irish environment. Most have very broad natural range, suggesting a very high level of variability and thus associated adaptability. They are the dominant canopy species of the natural vegetation of most of Ireland and support unique communities of plants and animals. They add to the rich genetic, species and ecosystem biodiversity and are part of our natural heritage, giving us an important cultural identity and uniqueness of our landscape.

Native species in Irish forestry

In 1996 a strategic plan for the development of the forestry sector in Ireland – “Growing for the Future” (Anon., 1996) was published. Up to that time, native species had been somewhat neglected in Irish forestry, however, late in 2001 the “Native Woodland Scheme” was launched with a revival and a renewed interest in native species. The Scheme was aimed at the proactive protection and expansion of Ireland’s native woodland resource and associated biodiversity, using appropriate close-to-nature silviculture.

As part of the requirement of the Native Woodland Scheme, all planting stock must originate from indigenous seed sources (Anon., 2001). This requirement necessitated the development of a system to identify, protect and manage suitable seed sources, to provide an adequate supply of forest reproductive material for the Scheme on a sustainable basis. A constant seed supply of native species, however, has proven problematic in the past as a result of the periodicity of seed years, particularly in oak, as well as the difficulties of long-term seed storage. Furthermore, the infrastructure for seed collection has never been fully developed, and while a new state of the art seed store was built in Ballintemple, some years ago, seed collection teams, covering the entire country have yet to be put in place. As a result of these difficulties, there has been extensive importation of oak seed over the past number of decades. Records in the Forest Service show substantial importation in the 1940s through to the 1980s (Table 2). A similar pattern of importation continues to the present day. The effects of this continuing importation of foreign sources of seed in native tree material are unknown but undoubtedly have the potential to cause severe contamination to native gene pools. One such example is the recent arrival of the narrow-leaved, or “brown bud” ash (*Fraxinus angustifolia*), which readily hybridises with the native common ash (*Fraxinus excelsior*). Narrow-leaved ash is a thermophilous tree species mainly occurring in southern Europe (Heurtz., 2003). It is a smaller tree (up to 25 m tall) than common ash (up to 40 m), and its wood is of lower quality (Picard., 1983). These two ash species have been reported to commonly hybridise in southeastern France and hybrid individuals are also found in nurseries there, among seedlings of common ash (Picard., 1983).

Table 2. Oak seed imports to Ireland from 1940 to 1980¹

Species	Year	Source	Quantity (kg)
Pedunculate oak	1933	Holland	230
Sessile oak	1933	Germany	230
Pedunculate oak	1934	Holland/Germany	450
Sessile oak	1935	Germany	340
Pedunculate oak	1935	Holland	680
Sessile oak	1936	Germany	1130
Pedunculate oak	1936	Holland	1130
Pedunculate oak	1937	Holland	1360
Oak (unspecified)	1939	Central Europe	3750
Oak (unspecified)	1940	Europe	1000
Sessile oak	1954	Germany	10
Sessile oak	1962	France	1130
Sessile oak	1963	Germany	900
Pedunculate oak	1964	Germany	900
Pedunculate oak	1965	Germany	900
Sessile oak	1965	Germany	900
Pedunculate oak	1967	Belgium	900
Sessile oak	1967	Germany	450
Pedunculate oak	1968	Belgium	1180
Sessile oak	1968	Germany	200
Pedunculate oak	1972	Holland	460
Pedunculate oak	1974	Germany	400
Sessile oak	1974	Germany	100
Pedunculate oak	1975	Germany	300
Sessile oak	1975	Germany	80
Pedunculate oak	1977	Germany	300
Pedunculate oak	1980	Germany	560

While there are strong arguments in favour of using local provenances, the answer to the question “how local is local” has yet to be determined.

Ireland has always been classified as one region of provenance for forestry purposes, which has led to some debate among foresters and ecologists. The issue is however kept under review and should evidence emerge that the country needs to be divided into a number of different ecological regions then division will be considered. Currently, such evidence does not exist.

¹ Register of seed purchased by Forest Service over the period 1930 – 1980, available from COFORD.

Provenance trials in some native species

Provenance selection is usually based on information collected from specially established provenance trials, which determine the variation in adaptability and growth performance of seed origins of a particular tree species under a range of growing conditions. These trials also show the degree and level of genetic diversity within and between populations, which has developed in adaptation to local environments. Knowledge of this variation and the plasticity of adaptive traits are useful when carrying out seed transfers as it allows the genotypes to be matched to their new environmental conditions

When provenance trials are not available, an alternative but less reliable system is the study of the performance of crops growing in a locality.

The provenance-testing programme on broadleaved species in Ireland began in 1984 with collection of native oak from semi-natural stands throughout the country.

Native oak provenance trials were established in Ireland in 1988 when 29 provenances were planted in four field trials at Camolin, Co Wexford; Durrrow, Co Laois; Belturbet Co Cavan and Donadea Co Kildare (Pfeifer, 1994). This collection is unique, since it is the first attempt at comparing the performance of different sources of native oak in this country. A recent preliminary assessment of these experiments has shown significant variation in performance between provenances, including discontinuous variation, especially the particularly strong contrasts between geographically adjacent sources (Felton, 2002). Following the success of the oak collection, a native ash collection was made in 16 sites across the country in 1985 and field trials were established in Drumsna Co Leitrim and at Clonegal Co Wexford. Recently, COFORD has funded improvement work on birch (O'Dowd, 2004)

Regulatory framework

On becoming members of the European Union in 1973, Ireland like all the other member states was required to adhere to regulations on forest tree seed. In 1966 the European Union (EU), then the European Economic Community, adopted Directives² on forest reproductive material. These Directives were designed to ensure that only seeds and plants of acceptable quality and known origin were offered for sale within the Community. However, these two Directives were adopted when the EU consisted of only six Member States. The aims and philosophy of forestry in these Member States at that time were very similar and climate and ecological conditions were not too diverse. These Directives required that a system of registered seed stands be established covering 13 species and one genus, *Populus*. With increased membership of the EU, now 25 and the more than doubling of forest area in Europe, these Directives need to be updated to reflect the change. On 1st January 2003, the new Directive, 1999/105/EC came into force in all Member States. Recent changes in this regulation have increased the number of species to 46 as well as *Populus*. To date a large area of seed stands has been selected (Table 3), and the process of selection is continuing.

To have a stand considered for registration, the owner is required to contact the regulatory authority, which in Ireland's case is the Forest Service, to arrange for an inspection. If the stand meets the specified selection criteria it will be issued with a unique stand number and listed in the official National Catalogue of Seed Stands for Ireland.

Under the new regulation seed suppliers and collectors must be registered with the Forest Service. Collection permits must be obtained from the regulatory authority as well as permission from the forest owner, before any collection commences. Information on all aspects of this process is available from the Forest Service.

Under the new regulation four categories of approved material are recognised:

² Directives 66/404/EEC and 71/161/EEC on the marketing of forest reproductive material (FRM).

Table 3. Area of native broadleaf seed stands, including source identified areas, selected in Ireland (Sept. 2004)

Species	Number of stands	Area (ha.)
Alder	3	85
Ash	7	140
Birch	2	11
Pedunculate oak	29	543
Sessile oak	36	1358

- Source Identified – reproductive material derived from basic material, which may be either a seed source or stand located within a single region of provenance. This is the lowest genetic category in commercial forestry.
- Selected – reproductive material derived from basic material from a stand located within a single region of provenance, which has been phenotypically selected at the population level.
- Qualified – reproductive material derived from basic material from seed orchards, parents of families, clones or clonal mixtures which have been phenotypically selected at individual level but where testing has not yet been undertaken or completed.
- Tested – reproductive material derived from basic material consisting of stands, seed orchards, parents of families, clones or clonal mixtures that have been proven to be genetically superior by scientific testing.

Future considerations

The emphasis on the use of native species, especially broadleaves, is likely to increase substantially in the future. A consequential increase in demand for native forest reproductive material is expected, which will necessitate the continuation of new stand identification and registration. The entire system of seed collection and processing may also need to be reviewed and further developed. While first class facilities for seed processing and storage are now in place at the Coillte nursery in Ballintemple, a comprehensive seed collection team network has yet to be fully established through out the country. As seed collection is rather seasonal, with no crop occurring in some years, there are many difficulties, including high cost associated with the maintenance of permanent seed collection teams.

Meanwhile, as new stands are identified there is a growing need to evaluate the performance of these stands. To implement this process, new provenance trials must be established, covering those native species that have not been studied to-date. This process is both costly and takes a long time.

To protect native genetic resources, present systems of control under current EU regulations for the importation of forest reproductive material must also be reviewed on a regular basis, to ensure that the regulation is serving our needs. Furthermore, stands of unique genetic value must be preserved as permanent gene conservation resources for future generations.

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FUNDING A FUTURE FOR IRELAND'S NATIVE WOODLANDS: THE DEVELOPMENT AND APPLICATION OF THE NATIVE WOODLAND SCHEME

Kevin Collins, Forestry Inspector, Forest Service, Dept. of Agriculture and Food
Agriculture House, Kildare Street, Dublin 2
Tel. 01-607 2502.
E-mail Kevin.Collins@agriculture.gov.ie

KEYWORDS: Irish native woodlands, policy, grant support, cross-sector partnership

Abstract

The Forest Service Native Woodland Scheme represents perhaps the most significant opportunity in the history of the State to contribute to Ireland's native woodlands, and is one of the most proactive initiatives in the area of biodiversity and habitat restoration in Ireland. The scheme represents a major component of the implementation by the Forest Service of Sustainable Forest Management, and contributes significantly to Ireland's National Biodiversity Plan under the UN Convention on Biological Diversity.

The Native Woodland Scheme has become firmly established through a close and intense partnership involving the Forest Service, Woodlands of Ireland, the National Parks and Wildlife Service, the Heritage Council, Coillte, the Regional Fisheries Boards and a wide range of other relevant bodies and representative groups, and through the enthusiasm and commitment of numerous land owners, foresters and ecologists working on the ground. It is beginning to yield wide-ranging benefits in the areas of native woodland protection and expansion, wood and non-wood production, and the application of traditional and alternative silvicultural approaches. The scheme is also enhancing the level of cooperation and understanding between forestry and ecology interests in general.

Over 40 projects have been undertaken under the scheme, including existing and new woodland sites under private, NPWS and Coillte ownership. A wide range of works has been funded, including rhododendron clearance and deer fencing, coupe creation, coppice restoration and the encouragement of natural regeneration. Projects to date have created a wealth of hands-on knowledge and experience of native woodland management. They have also highlighted obstacles limiting progress, and ways in which the scheme can be enhanced. Advances have also been made across a broad range of support measures for the scheme, e.g. the 3-day Native Woodland Scheme Training Course, the development of the list of Participating Foresters and Ecologists, and forthcoming silvicultural guidelines for timber production under the scheme.

This paper reviews the progress of the Native Woodland Scheme to date. It also explores ways in which the scheme can be further refined, in order to enable it to overcome current difficulties and to continue fulfilling its key objective of protecting and expanding Ireland's native woodland resource.

Introduction

Native woodlands once covered most of the island of Ireland, and represent the potential natural vegetation which most of the countryside would revert to in the absence of human activity. They are among our most valuable ecosystems, each comprising a unique community of plants and animals. However, Ireland's native woodlands have been under constant pressure since early history, culminating in significant clearance, exploitation and neglect over recent centuries. Today, surviving fragments scattered across the island account for just 80,000 ha or about one percent of Ireland's land area. Many are under severe pressure from neglect, grazing, invasive species and development, and are in urgent need of sensitive management to secure their survival and long-term regeneration.

The last decade has seen a growing recognition of the immense ecological and cultural value of these unique habitats, leading to several major national initiatives including the establishment of the Woodlands of Ireland group, the People's Millennium Forests project and the Native Woodland Scheme (NWS), which forms the topic of this paper. This new appreciation has developed in line with Ireland's clear obligations to protect important habitats under national, European Union and international legislation, conventions and protocols, including the Wildlife Act, the Habitats Directive, Sustainable Forest Management (SFM) and the UN Convention on Biological Diversity.

The NWS is aimed at encouraging the proactive protection and expansion of Ireland's native woodland resource and its associated biodiversity, using appropriate 'close-to-nature' silviculture. Where compatible, the realisation of wood and non-wood products is also encouraged. The scheme provides financial support for landowners to protect and enhance existing native woodlands and to establish new native woodlands. The NWS was initiated and is being implemented by the Forest Service, Department of Agriculture and Food, in partnership with Woodlands of Ireland, National Parks and Wildlife Service (NPWS), Regional Fisheries Boards (RFBs), the Heritage Council and others, as outlined below. It is funded under the National Development Plan 2000-2006, supported by the European Union.

Unique features of the NWS

The NWS differs from other Forest Service schemes in ways that reflect its specific aims and underlining ecological principles. Some of these differences are outlined below.

- The NWS is divided into two separate elements. *Element 1: Native Woodland Conservation* provides up to €4,444/ha for the protection and enhancement of existing native woodland, including the conversion from non-native to native status. *Element 2: Native Woodland Establishment* provides up to €4,952/ha for the creation of new native woodland. The standard afforestation premium is also available under Element 2, up to €442/ha for 20 years. A unique feature of the scheme is the availability of a continuous Native Woodland Premium under both elements for up to €120/ha/year.
- Planting under the NWS is limited to species deemed native to the island of Ireland. A list of acceptable species is set out in the scheme's brochure, divided into overstorey species, and understorey and minor species. Other natives not included on this list can also be proposed, and are considered on a case-by-case basis. For example, the strawberry tree (*Arbutus unedo* L.) is excluded from the general list as this species has an extremely limited range within Ireland, and would only be considered if proposed for planting on certain sites in areas of the south- and north-west.
- In order to conserve native genetic biodiversity, all plants used under the NWS must originate from seed collected from suitable sources within the island of Ireland. Furthermore, planting in Special Areas of Conservation (SACs), Natural Heritage Areas (NHAs), Nature Reserves, National Parks and known ancient woodland must use plants originating from seed collected from within the respective area or, if unavailable, from some other source acceptable to both the Forest Service and NPWS. To ensure traceability from seed collection to final planting, all material used under the NWS must adhere to the EU Council Directive 1999/105/EC on the marketing of forest reproductive material, and Forest Service regulations.
- The natural woodland cover across Ireland comprises a mosaic of different woodland types – from the acid oakwood of the Wicklow uplands to the yew wood of Killarney to the hazelwood of the Burren – all of which reflect the underlying soils, elevation, climate, etc. Each project under the NWS must promote the most appropriate native woodland type (including species composition and characteristics) for that particular site. Under Element 1, this might entail the underplanting of species characterising the native woodland type but underrepresented within the existing woodland, the removal of exotics such as sycamore or beech, or even the clearfell of an existing conifer crop and reforestation with an appropriate species mix. On Element 2 sites, it usually entails planting with an appropriate species mix, supplemented by natural regeneration from suitable sources.
- Each application under the NWS involves the development of a site-specific Ecological Survey / Management Plan (ES/MP) involving input from both an ecologist and a forester. This document is a key element of the process, setting out the ecological priorities for the site, and how work is to

proceed. Progress is measured against this document: grant payment is dependent on the achievement of the short-term objectives set out in this plan, and spot inspections will be carried out by the Forest Service to ensure continued adherence to the plan in the medium and long term.

- Ecologists and foresters working with the NWS must satisfy the Forest Service that they have the necessary knowledge and expertise to undertake the type of work involved. In order to become a Participating Forester under the NWS, foresters must already be on the list of Forest Service Approved Foresters, and must also undertake training. In order to become a Participating Ecologist, ecologists must satisfy three criteria relating to an assessment of their qualifications and experience, training and professional indemnity insurance.
- Projects within SACs, NHAs and Special Protection Areas (SPAs) are eligible for funding under the NWS, where deemed compatible with the conservation designation. This process involves detailed consultation with NPWS at two separate stages in the application procedure.
- Wood and non-wood production is encouraged under the NWS, where compatible with the primary objective of promoting the most appropriate native woodland type. In the case of wood production, various silvicultural systems (e.g. single tree or group selection, coppicing) can be used to manage the woodland in a way that will promote its natural composition and structure while also creating an opportunity for high quality wood products, from small diameter material to hardwood sawlog. Realising such opportunities forms the basis for the long-term sustainability of Ireland's native woodlands beyond the NWS, by incorporating them directly into rural livelihoods.

Development and implementation of the NWS

The NWS originated in the late 1990s from discussions largely initiated by the late Freda Rountree, then-Chairperson of the Heritage Council, and involving the Forest Service, then-Dúchas The Heritage Service, and the Heritage Council. A subsequent document developed by Woodlands of Ireland in 1999 outlined how a new grant scheme for native woodlands might operate. Details were further developed by the Forest Service in close co-operation with Woodlands of Ireland and its Technical Advisory Group, Dúchas The Heritage Service, the Central and Regional Fisheries Boards, the Marine Institute, the Heritage Council, People's Millennium Forests, Coillte, COFORD, woodland owners, the nursery sector, researchers, forestry consultants and others. This work culminated in May 2001 in an agreed framework document setting out the principles, structure and operational details of the new scheme. This document formed the basis for the scheme's brochure and for the first version of the *Native Woodland Manual: Procedures, Standards and Decision Support for the Native Woodland Scheme*, published in May 2002.

The scheme was subsequently launched in Charleville Castle, Tullamore, in November 2001 by Mr Hugh Byrne, then-Minister of State at the Department of the Marine and Natural Resources. Shortly afterwards, a project involving the restoration of a coppice hazelwood near Castlebar, Co. Mayo, received grant funding, marking the very first step in the protection and enhancement of Ireland's native woodlands under the new scheme.

The above process represented a major investment of time and effort by all of the partners involved, and entailed exhaustive discussion and debate on various aspects of the scheme. However, this process ensured that the scheme was based on the very best knowledge and expertise available in Ireland in the area of native woodland ecology and management, and secured a wide consensus across all of the relevant authorities and interests on how it should operate. Both factors have provided a solid foundation for the implementation of the NWS.

Interest amongst potential applicants grew steadily during the scheme's development period, resulting in a sizable flow of applications throughout 2002. That year also saw the implementation of a comprehensive training programme by the Forest Service and Woodlands of Ireland to 'upskill' people who would be involved in developing projects under the scheme. A major threat emerged in the second half of 2002, with the reduction in funding for forestry in the Government's Book of Estimates. However, an allocation of €620,000 for the NWS was secured for 2003, and this was subsequently distributed to various projects selected on

ecological merit. As interest in the scheme continued to grow, the allocation increased in 2004 to €1.0 million for Element 1 sites, with Element 2 sites to be funded under the general Afforestation Scheme budget. In 2004, sites were allocated funding largely on a 'first-come first-serve' basis, with larger multi-annual projects funded during 2003 receiving a second instalment to progress work. Table 1 sets out work carried out to date (September 2004) under the NWS. As of the end of July 2004, the Forest Service had received 246 applications under the NWS, comprising 173 Element 1 applications, and 73 Element 2 applications. This represented a total area of 4,353.58 ha; 3,619.93 ha under Element 1 and 733.65 ha under Element 2.

TABLE 1. Area under Element 1 and Element 2 of the NWS either completed or in the process of being completed (September 2004). Figures are presented for the private sector, National Parks and Wildlife Service (NPWS) and Coillte.

Ownership	NWS Element	2001	2002	2003	2004 (Projected)	Total
Private	Element 1	0.5 ha		142.44 ha	237.42 ha	380.36 ha
	Element 2			30.1 ha	42.02 ha	72.12 ha
NPWS	Element 1			21.37 ha	c.170 ha	191.37 ha
	Element 2					
Coillte	Element 1		69.7 ha		106.40 ha	176.10 ha
	Element 2					
Total		0.5 ha	69.7 ha	193.91 ha	555.84 ha	819.95 ha

At the time, the reduced funding for the NWS led to widespread disappointment and major concerns about its future. However, it did provide a lifeline for the scheme through a very difficult period for the forestry sector in general. Also, it had the unintended but highly beneficial effect of slowing down the initial rollout of the scheme, allowing time for problems to be ironed out and necessary adjustments to be made, and enabling all those involved – from landowners, foresters and ecologists to Forest Service, NPWS and RFB personnel – to become familiar with the scheme and its workings. It also provided the space to further develop the various support measures for the scheme, such as the continuation of training and the expansion of the Participating Ecologist list.

Achievements to date

As of September 2004, a number of significant achievements have been made under the NWS. It is important to point out that this progress has been due to the continuing partnership of all those organisations and individuals involved in developing the scheme, and also to the enthusiasm and commitment of landowners, ecologists and foresters who have developed and implemented projects on the ground.

The primary achievement is the fact that the NWS is now operational and doing what it was intended to do – funding the protection and enhancement of Ireland's native woodland resource. Projects amounting to approximately 820 ha have been completed or are underway across Ireland (see Table 1), involving a wide range of works, from deer fencing and rhododendron removal, to regenerative coupe restructuring, conversion from non-native to native woodland, and coppice restoration.

Significant progress has also been made in relation to the various support measures for the scheme, which are vital to its long-term development. An overview of some of these measures – training, list of Participating Ecologists, and support literature – is described below.

Training

A significant amount of training has been undertaken, specifically aimed at ‘upskilling’ people involved in NWS projects. From the earliest stages of the scheme’s development, such training was seen as being a vital prerequisite, not only in briefing people as to how the scheme operates, but also in the creation of a baseline of knowledge and awareness of native woodland ecology and appropriate management. The training programme is implemented jointly by the Forest Service and Woodlands of Ireland, with both (the latter through its Training Sub-Group) inputting into course development and content.

The bulk of the training carried out to date has involved a total of nine 3-day Native Woodland Scheme Training Courses. The first, effectively a ‘dry run’ of how the course should be structured, was held in Pontoon, Co. Mayo, in November 2000. The remaining eight were held in the central location of Tullamore, Co. Offaly, in February, July and December of 2002, and July and November of 2003. These courses comprised indoor sessions involving a number of expert speakers delivering papers on various aspects of native woodland ecology and management (e.g. native woodland classification, natural regeneration, rhododendron control, appropriate silvicultural systems). This was complemented by a detailed field exercise in Charleville Estate, whereby small mixed-discipline groups worked on ES/MPs for different areas of the woodland, following the NWS structure. Each group subsequently presented proposals for its area in a plenary session, and these were then compared and contrasted with an official plan for the area. Completion of this 3-day course is one of the conditions involved in becoming a Participating Forester or a Participating Ecologist under the NWS.

To date, over 400 individuals have completed the NWS Training Course. Participants represented all of the different groups directly involved in developing projects under the NWS, as well as a wide range of other interested parties. Participants included Forest Service, NPWS and RFB personnel, landowners, foresters, ecologists, forestry contractors, nursery managers, and representatives from environmental NGOs and third level institutes. These 3-day courses gave participants a common understanding of native woodland ecology and management, a ‘crash course’ in the operation of the NWS, and a direct, hands-on experience of development applications. This in effect has created the necessary skills and knowledge base for the initial start-up of the NWS, as well as creating invaluable feedback as to how the scheme could be enhanced. The courses also created an open forum for discussing the multitude of issues relating to the ecology and management of native woodlands. Feedback sheets indicated a very positive reaction to the courses, with many participants welcoming the opportunity to interact with people from the different professional groups and bodies represented, in an informal learning atmosphere.

In addition to the 3-day course, further training was deemed necessary to focus on groups in key areas. One such group are the forest contractors, whose front-line expertise in forestry operations can dramatically influence how appropriately the site is treated and how successfully the plan is implemented. A total of four 1-day NWS Contractor Training Courses were held in 2004, in Counties Wicklow, Monaghan, Mayo and Cork, targeting forestry contractors within each respective region. The course involved an indoor session outlining how the approach to operations under the NWS differed to that under other schemes such as the general Afforestation Scheme or the Woodland Improvement Scheme. This was followed by a visit to a completed NWS site (St. Savior’s Wood, Brandrum, Ballyvary and Glengarriff) led by those directly involved in the project, to discuss the various operations carried out. Each site had a different focus (conifer clearfell and reforestation with native woodland, coupe felling and replanting, coppice restoration, and rhododendron clearance), and was selected in order to represent some of the general site conditions and issues typical of that region. Over 55 individuals participated in these courses, representing a sizable portion of the forestry contractor sector in Ireland.

Further training is planned for 2004, 2005 and beyond, including repeats of the 3-day NWS Training Course to cater for the current waiting list of over 200 individuals, and a series of 1-day courses on the design, establishment and management of native woodland on riparian sites, targeted primarily at RFB and NPWS personnel. Additional needs are also becoming apparent, such as training on seed collection and nursery management, and regional training days in completed NWS sites, specifically to further ‘upskill’ those who previously completed the 3-day training course.

List of NWS Participating Ecologists

A core aspect of the NWS is the input of a professional ecologist, alongside that of a professional forester, into the development of the site-specific ES/MP. This input is pivotal in identifying ecological considerations and priorities (including the most appropriate native woodland type) which form the basis for what is actually proposed for the site, as set out in the management plan. There exists significant variation in the ecological profession in Ireland, which encompasses people with a wide range of different qualifications, disciplines and expertise. It was therefore realised early in the scheme's development that a procedure was required to assess ecologists wishing to work with the NWS, in order to ensure that they are suitably qualified and experienced in the area. As such, ecologists wishing to be included in the list of NWS Participating Ecologists must fulfil three separate criteria, outlined below.

- Individuals wishing to be included on the list are invited to make a submission to the Forest Service setting out their relevant ecological qualifications and experience, together with an example of recent work authored by the applicant. This submission is subsequently evaluated by the Forest Service.
- Individuals must complete the 3-day NWS Training Course.
- Individuals must also submit proof of Professional Indemnity Insurance (PII) cover for a minimum of €320,000. PII cover is a fact of life in consultancy work across many disciplines, from engineers to accountants to foresters, and is also common amongst consultant ecologists in other countries.

Having fulfilled all three criteria, the applicant is included in the list of NWS Participating Ecologists for general distribution to landowners and foresters, and is in a position to work and sign off on ES/MPs under the NWS, alongside Participating Foresters.

Support literature

In May 2002, the first version of the *Native Woodland Manual* was produced, setting out the procedures and standards of the NWS and details on the classification of native woodland types. This manual was intended as a 'one-stop-shop' for all those involved in the scheme, containing details on its scope, acceptable operations, grant rates, terms and conditions, and the procedure involved in developing applications. It also included a framework governing how ES/MPs are to be developed, in order to ensure consistency. Work on overhauling the manual is due to start shortly, with a view to making it more concise and to incorporate numerous improvements to the scheme arising from experiences gained from its initial implementation. This second version is due to come onstream in early 2005.

During the course of the scheme's development and initial implementation, various experts have written a significant amount of material on topics relating to native woodland ecology and management. It is intended that much of this will be published jointly by the Forest Service and Woodlands of Ireland as a series of 'decision support' information notes in 2005.

Another publication of major relevance to the NWS is the document entitled *Realising Quality Wood from Ireland's Native Woodlands*. This document, developed by Woodlands of Ireland with Forest Service support, is based on a detailed study by leading experts from Ireland, the UK and Germany, into the silviculture and economics involved in managing native woodland for wood production within the context of the NWS. The document, due to be published in early 2005, will represent a useful guide to woodland owners and managers operating under the NWS.

Wider impact of the NWS

The implementation of the NWS is also having wider, and sometimes unexpected, impacts in other areas extending beyond the scheme itself.

- One clear benefit is the close partnership realised between forestry, conservation, fisheries and ENGO sectors in Ireland, both in developing the scheme at a policy level, and in implementing it at a site level.

Given the wide benefits of native woodlands, the scheme advances the cause of each of these sectors, creating a common ground for understanding, proactive cooperation and synergy that can spill over into other areas.

- The implementation of the NWS represents a build-up of expertise regarding the appropriate management of native woodlands. It is also providing a ‘foothold’ for the application of traditional and alternative forms of silvicultural approaches in Ireland. It is likely that, over time, both of these factors will contribute positively to the practice of forestry generally in this country.
- The NWS is also stimulating initiatives involving a more strategic approach to managing the Irish countryside. For example, discussions are underway to explore how best to implement the scheme on a water catchment basis, whereby native riparian woodland projects can be strategically located to optimise benefits vis-à-vis water quality protection and enhancement of the aquatic habitat. Similarly, the NWS is adding to calls for a nationwide programme to control deer, rhododendron and grey squirrel. The experiences gained under the NWS are also inputting into the development by the National Roads Authority (NRA) of guidelines for ecological roadside design and planting, thereby helping to ensure, for example, that species used are compatible with the surrounding natural habitats. Furthermore, the integration of the NWS within the Rural Environment Protection Scheme (REPS) has also been advocated, to secure greater cohesion between the two measures.

Issues arising

Undoubtedly, major progress has been made in establishing the NWS, again thanks to the partnership between the Forest Service, Woodlands of Ireland, NPWS, RFBs and others, and through the enthusiasm and commitment of the landowners, ecologists and foresters involved. Reviewing progress illustrates what is working, and also, what is not working. A number of issues have arisen to date that need to be addressed, if the scheme is to reach its full potential.

- Of major concern is the long-term funding for the NWS. Currently, the scheme is allocated funding on a year-to-year basis, and this is creating a general uncertainty as to whether or not it will continue, and at what level. One major impact is the reluctance of the nursery sector, in the absence of a secure market, to commit to growing large quantities of native material that satisfies the specifications of the scheme. Another effect is the reluctance amongst potential Participating Ecologists to take out the required insurance, due to concerns regarding whether or not future work under the NWS will justify the cost.
- The current year-to-year funding system – whereby funding is announced and allocated in March/April, and the deadline for receipt of invoices set for September/October – is also creating difficulties on the ground. The compilation and approval of the ES/MP and the completion of operations must all take place within this tight timeframe. This places considerable pressure on landowners and can lead to less-than-ideal practices, such as out-of-season planting.
- A major challenge is how best to tackle larger sites. The current system for such sites – whereby applicants are given an allocation to complete discrete areas on an annual basis – is problematic. This system means that the owners can only recoup front loaded costs required for the entire site from the very onset (e.g. ES/MP, deer fencing) gradually over several years, by assigning the *pro rata* cost for these expenses to each area worked on within a particular year. This system is also preventing owners from realising economies of scale in operation. For example, each year requires the same suite of machines to be brought onsite to work on often adjoining areas, as opposed to being brought onsite once and covering the entire area in a single sweep. A possible solution is to issue approval for the entire site over an extended timeframe, and to introduce interim payments as agreed operations are completed.
- Another obvious difficulty surrounds the current specifications for natural regeneration. Currently, areas designated for natural regeneration must reach the required density (i.e. that of planted areas) within 4 to 5 years. If such density is not being reached, the owner is required to fill-in with planting stock in order to draw down the grant payment. This can discourage owners to select the natural regeneration option, foregoing a range of ecological and other benefits, including reduced pressure

on available planting stock, particularly oak and hazel. This perhaps points to an obvious need to introduce a longer timeframe and less stringent density requirements for areas designated for natural regeneration. A similar concern has also been expressed about the appropriateness of standard planting specifications in areas planted under the NWS, and whether or not lower stocking rates and more 'organic' planting patterns are needed.

- Other difficulties surround the application process, which many find cumbersome. The process differs from that of other grant schemes in that it involves a preliminary assessment of whether or not the project is suitable for the NWS, before the applicant launches into the process and expense of developing a detailed plan. It also differs in its requirement for the ES/MP itself. Both aspects are seen as being essential to the NWS process, but could be looked at to see if they can be streamlined. For example, the framework document setting out how the ES/MP is to be compiled can be further refined to avoid unwarranted replication. Much doubt has also been expressed regarding the necessity of the permanent quadrat currently stipulated, particularly regarding cost benefit issues in terms of the time and expense it involves, and the usefulness of the information gathered.
- Another area requiring attention is the differing understanding and interpretations across the various sectors involved regarding the scope of the scheme and the procedures and standards that apply. Again, this is a reflection of the fact that the scheme is breaking new ground, introducing a host of new standards and procedures that require time to bed down. It does, however, underline the importance of the training programme, *Native Woodland Manual* and other communication measures.

These and other issues are currently being looked at by the Forest Service in consultation with Woodlands of Ireland and other partners, with a view to modifying and streamlining the scheme for 2005.

Looking ahead

The NWS is highly innovative in terms of its objectives and principles, requiring a wide range of new procedures and support structures. It is a complicated scheme that relies heavily on a strong partnership between a number of different bodies. However, despite the challenges created by these factors, the scheme is now firmly established as a viable and workable option for Irish landowners. The scheme is also beginning to achieve what it was originally set up to do, i.e. to promote the protection and enhancement of Ireland's native woodland resource.

As described above, a variety of issues have emerged during the initial implementation of the NWS. While these must now be addressed if the scheme is to continue to grow and develop, they indicate that the scheme has now progressed to a stage where it has outgrown its original start-up structures. This need to adapt was foreseen from the very start of the scheme's development, as illustrated by the commitment in the original brochure that the scheme would be reviewed periodically, incorporating any alterations deemed necessary.

The NWS remains one of the most proactive initiatives in the area of biodiversity and habitat restoration in Ireland, and presents perhaps the most significant opportunity in the history of the State to contribute to our native woodland resource. The challenge now is for all of those involved to continue to work in close partnership to fully realise the potential of the Native Woodland Scheme, in order to secure a future for our native woodlands as a living and thriving component of the Irish landscape.