

# Celebrating a new Millennium

*through the*

## People's Millennium Forests

Audit of Sites Autumn 2007

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### 1.1 Executive summary

The "People's Millennium Forests" is a project aimed at developing a series of national forests of indigenous species to celebrate the commencement of the third Millennium. Fourteen sites were chosen in the Republic of Ireland and two in Northern Ireland for this project. This audit focused on those sites in the Republic. Each site was visited and an assessment made of its progress towards achieving its objectives. The audit covered a broad range of criteria with recommendations for improvement where necessary.

The fourteen sites covers a total of 585 ha of which 323 ha (55%) was planted as part of the "Householders Tree Scheme" with 1,268,000 plants, representing on average 3,927 plants per planted ha.. The remainder are either already an indigenous forests or are designated to become so in a period of years and are referred to as conservation areas. Additional to this there are two sites in Northern Ireland covering 25ha approx.

Substantial progress towards forest establishment was recorded on all sites. This progress however varied between, and within, sites depending upon site conditions and level of maintenance. Most sites had full stocking levels with only a few isolated locations where crop establishment was proving difficult. Where this was happening factors such as poor site conditions, rabbits, deer or competition from competing exotic vegetation were the main culprits rather than any purposeful lack of maintenance or negligence. A feature of most sites was the level of natural regeneration of such species as birch, sally and occasional hazel and other species. In many places this regeneration was at the expense of the planted material and raises question as to the ultimate destiny of this regenerated material and how this should be managed in the decades to come.

The grid markers demarcating the "Householders Trees Scheme" were still substantially present, although difficult to see in many places because of growth in ground vegetation. These grids are becoming irrelevant as the years pass and the trees advance towards respacing or thinning. A new grid marker scheme advocated last year has been implemented in places. This allows for grids on either side of roads and paths to be indicated on a single post. This would allow interested householders to see the general location of their tree rather than a specific grid.

The recreational and information facilities were considered good to excellent. Paths, seats, picnic tables, notices and access to car parking were in good condition. Access to three car parks was restricted however by virtue of their distance from the public road, and reflecting presumably, the perennial concern for public safety, dumping and vandalism.

The 262 ha. in the Republic designated as conservation areas vary in species, structure and legal designation. Most consist of a percentage of exotic species of various age structures. Only a handful are legally designated as National Heritage Areas (NHA) or Special Areas of Conservation (SAC). While it is a common objective for all these areas to be transformed into indigenous forests as the exotic species mature, clear and precise prescriptions are lacking. This issue should be addressed with declared transformation time scales incorporated into the management regimes for each site.

The public perception of the “People’s Millennium Forests” relates to the planted areas only and not to the entire area which includes the conservation areas. This is understandable since public comment to date has focused on those areas. This is regrettable in the context of the contribution the conservation area can make to the overall objectives of the Millennium forests.

The project has been a remarkable success considering the limited time scale associated with its commencement, seed collection and production of seedlings. The main objectives are being achieved and should be fully achieved within a decade.

The planted sites are, in general, on the brink of establishment. That the established forest ultimately emerging may not be of the species mix originally planted should not be a major issue, assuming that the forest is of native species sourced in Ireland.

Almost without exception the facilities and interpretation on site were good, well maintained and showing few, if any, signs of vandalism. Small issues of Perspex cleaning and applying the occasional coat of preservative does not detract from the overall impression of good care and maintenance.

All Millennium sites (i.e. planted sites and conservation areas) are clearly demarcated and digitised on Coillte’s IT system. Copies of the Millennium maps can be included on the Millennium website showing exact area and species boundaries.

## **1.2 Summary of recommendations**

- Adopt the term “Millennium Forest” and change signage as replacements demand. Signs to “Millennium Trees” would then be replaced with signage to “Millennium Forest”. This would help to move attention from individual trees to the forest and keep pace with crop establishment.
- Continue with grass cleaning in those locations where the planted trees are not clearly established.
- The “Conservation Areas” are an additional resource to the planted sites. These areas have not been fully recognised to date as part of the “Millennium Forests”. A new focus should be placed on such areas and a programme of transition to native woodland should be initiated under the “Native Woodland Scheme”.
- Continue, with renewed vigour, the programme of removal and/or control of exotic species, both plant and animal. In particular, the very steep area in Rossacree na loo currently carrying a low stocking of lodgepole pine and Sitka spruce. This area should be cleared and managed to regenerate naturally with native species.
- Erect grid markers in the newly planted oak area at Rossacree na loo.
- Update the website and produce a simple brochure on the plan for each Millennium Forest as well as the adjoining conservation areas.
- Include visits to Millennium Forests as part of National Tree day (October) for school children, National tree week (March) and Heritage day (August)
- Investigate with the Ordnance Survey about including the Millennium Forest sites on their Discovery series and other maps.

## 2. Background to People’s Millennium Forests

### 2.1 National Millennium Committee

The opportunity to celebrate the beginning of a new Millennium in novel and innovative ways lead to the Government of Ireland establishing a National Millennium Committee in November 1998. This 15 member committee had a budget of IR£30 million (€38.09 million) with which to support projects that “*commemorated and celebrated the Millennium in a visionary, dignified and lasting way*”.

### 2.2 Development of proposal

Prior to the establishment of the National Millennium Committee a number of individuals and organisations within the Irish forestry sector were considering how the new Millennium could be marked in an appropriate forestry manner. Interested organisations were invited to a meeting hosted by the Heritage Council in their headquarters in Kilkenny in mid summer 1997 to discuss possible proposals. This was followed by a press announcement and a public meeting in Trinity College on 18<sup>th</sup> October 1997 requesting submissions on a tree related millennium project. Over fifty proposals were subsequently received by the Tree Council of Ireland who acted as co-ordinator. The “Woodlands of Ireland” group, which was established by Freda Rountree in July 1997, examined these proposals and developed a single proposal which could be presented to the National Millennium Committee when that committee was formed. This proposal was presented by “Woodlands of Ireland” to the National Millennium Committee on 18<sup>th</sup> April 1999. While the proposal was well received it was considered inappropriate for a small group like “Woodlands of Ireland” to manage such a project.

### 2.3 Coillte’s role

Meanwhile Coillte was also considering a project incorporating many of the elements of the “Woodlands of Ireland” proposal and invited “Woodlands of Ireland” to become a partner in a revised project entitled “Enhancing Irish Native Woodlands”. This project was presented to the sponsors on 14<sup>th</sup> June 1999 and formally approved by the Millennium Committee in November 1999 and launched by the Taoiseach in December 1999 and became known as the “People’s Millennium Forests”. Coillte was appointed to manage the project.

## 3 People’s Millennium Forests Project

### 3.1 Project Mission

*To ensure that all future generations can enjoy the benefits of Ireland’s native forests.*

### 3.2 Main Objectives

- To enrich and expand Ireland’s native forests
- To help people to appreciate our native forests
- To develop the capacity to manage our forests in a sustainable manner

Essentially the project was to focus exclusively on the restoration and creation of native woodlands combined with complementary activities aimed at engaging the general public.

### **3.3 Project budget**

The overall budget was Ir£ 4 million (€5.08 million) sponsored as follows:

Allied Irish Bank	Ir£ 2.0 million
National Millennium Committee	Ir£ 1.6 million
Forest Service	Ir£ 0.4 million

### **3.4 Millennium sites**

16 sites were chosen throughout Ireland, 12 sites owned by Coillte, 2 owned by the Northern Ireland Forest Service, 1 owned by the National Parks and Wildlife Service and 1 owned by the Westmeath County Council. A total of 570 hectares was to be involved and would consist of preparation of ground, fencing against trespassing animals particularly sheep and deer, the removal of non native species, planting of native tree species and the provision of interpretative and recreational facilities. Prior to work being undertaken on the sites, ecological and archaeological surveys were to be undertaken and all the relevant data to be inputted into the management plans for each site.

### **3.5 Complementary activities**

These included programmes of education, training, promotion, involvement and public relations. The planting of native trees would come under the “Household Tree Scheme” whereby each household in Ireland would have a native tree planting at one of the 13 sites of the 14 sites in the Republic of Ireland. The 14<sup>th</sup> site was exclusively for the protection of a unique native yew wood in Killarney. The “Household Tree Scheme” was launched by the Taoiseach on 6<sup>th</sup> November 2000 and the 1.2 million certificates were posted week commencing 20<sup>th</sup> November 2000.

## **4. Audit**

### **4.1 Scope of this Audit**

This audit was to inspect each of the 14 sites in the Republic of Ireland and to report and make recommendations on:

1. The condition and growth of the planted trees,
2. The grid system within which the trees are planted
3. The condition and progress of the adjoining conservation areas incorporated within the designated area
4. The recreational and interpretative facilities
5. Their overall progress towards the establishment of a native forest.

### **4.2 Audit Dates**

The field work associated with this audit took place between 25<sup>th</sup> September and 25<sup>th</sup> October 2007. An individual audit report for each site is attached as an appendix to this document with photographs illustrating the various elements observed during the audit.

### **4.3 The audit team**

The team consisted of two persons Mr Fergal Mulloy and Mr Pat Doolan.

## **Fergal Mulloy**

Qualified as a forester in 1957 from UCD and served with the Forest Service for over 40 years in all aspects of forest management and wildlife management. He was appointed the first Director of COFORD on its establishment in 1992. In 2000 he became Director of the European Forest Institute in Finland and subsequently acted as its Board chairman. In 2004 he was awarded a special RDS lifetime achievement award for his services to Irish forestry. He is currently a research associate in UCD.

## **Pat Doolan**

Trained as a forester between 1961 and 1964 with the Forest Service at Kinnity Castle and Shelton Abbey. Worked as a forester in counties Wicklow, Laois, Offaly, Kilkenny, Tipperary and Donegal. Joined the Inspectorate of the Forest Service in 1977 and served in Mayo, Galway, Kildare and moved to headquarters in Dublin in 1991 as Coillte's Silvicultural Support manager. Awarded a M.Agr.Sc (For.) in 1998.

### **4.4 Condition and growth of planted trees**

Overall the health and growth of the trees planted is good with some notable exceptions. However these exceptions are small in both number and area and are estimated not to exceed 5 - 10 % of the overall area. In most of these areas the trees are either present but hidden by excessive vegetation or are exceedingly slow in establishing themselves. The site conditions on parts of two sites (Cullentra and Rosacroonaloo) appear poor and perhaps inappropriate as a site for this project. However even on these sites there is an indication that natural regeneration of birch and/or alder is likely to eventually give a ground cover, and ultimately a forest, albeit not with the species originally chosen.

The ash at one site (Derrygorry) is showing some signs of dying back and should be further investigated.

Growth rates are generally good. Indeed on some sites the alder and oak are quite exceptional e.g. Shelton (Kilbride), Tourmakeady, Lacca, Glengarra, Camolin (Ballyduff) and Derrygorry). The alder on one site has already undergone a thinning (Tourmakeady) while the alder at another site (Shelton Kilbride) is in urgent need of thinning. The tallest planted oak seen was at Lacca and was estimated to be 4.25 metres.

Where planted Scots pine is showing excellent growth and health.

### **4.5 Grass cleaning**

Grass cleaning is still required in parts of most sites and although such cleaning may not be strictly required silviculturally it is certainly needed to demonstrate that the planted trees – or their replacements – are physically present if only to retain public confidence in the project.

### **4.6 Exotic species**

#### **4.6.1. Deer**

Introduced deer (fallow and sika) and establishing a forest of native species are incompatible and great credit is due to the project managers for recognising this at the start of the project they have, for the most part, succeeded in protecting the sites from damage in the intervening years. Most of the sites were in localities where deer were present and expensive deer fencing was

essential. A constant watch is required to ensure that this infrastructural investment is maintained for at least twenty years otherwise the integrity of the new forest could be threatened. Some deer evidence was observed at three sites (Cullentra, Derrygill and Rosturra) and, while of minor significance, it will require measures to ensure that the situation does not get out of hand.

#### **4.6.2. Rabbits**

Severe damage was experienced in the early years with rabbits at Shelton Abbey. This has certainly held back progress but with protective measures and advanced tree size this problem is unlikely to reoccur.

#### **4.6.3. Grey squirrels**

There is no evidence – as yet - of any damage by grey squirrel.

#### **4.6.4 *Rhododendron ponticum***

Constant vigilance is necessary to control the spread of *Rhododendron ponticum* on the sites prone to infestation from the neighbouring forest. This issue has been tackled on these sites and, in only few incidences, is there any evidence of serious infestation. However a programme of eradication must receive priority. One site (Tourmakeady) has certainly got a problem but this must be balanced against the enormous cost of eradication and halting its spread with doubtful long-term benefits.

#### **4.6.5. Sycamore, beech and conifers**

Most sites have some or all of the above although their presence is not considered widespread. With the exception of sycamore at Shelton abbey, most of these exotics can be removed without serious cost and should continue to be targeted.

### **4.7. Grids**

The original grid markers were mostly only visible at or beside existing paths or roads. A new system of replacement has been undertaken at some sites (e.g. Derrygorry, Lacca) and this should be continued for all sites. The replacement grid markers should be placed on a substantial stake at road or path side showing the grid numbers to the left or right of such paths. Consideration should be given to a tag of standard size, colour and shape while the stake itself should be painted a distinct colour (red is suggested)

### **4.8. Condition and progress of the adjoining conservation areas**

Most sites had conservation areas attached to, or close to, the planted sites. These woodlands areas are included in the overall area dedicated to the “People’s Millennium Forests” project. They are variously described in the different sites as “Conservation area” “Native woodland restoration area” “Mixed Woodland” “Mature Oak Woodland” “Old Woodland” “Old oak Woodland”. While they may all be included in the broader concept of Coillte’s continuous cover forest area of 27,000 ha., a separate plan for each area is not clear. Management inputs appear to vary from active intervention (Derrygorry) to non-intervention (Cullentra). This issue should be addressed as these areas are an integral part of the overall project and could ultimately emerge as important as the planted sites.

The Portlick site, comprises 52 ha of primarily mixed matured broadleaves. It is owned by Westmeath County Council and forms part of a SAC and a NHA. The planted area of Millennium forest amounts to 6.5ha: 5.5ha of Ash and 1ha of Oak. It also comprises a small area of Hazel Coppice Regeneration. The remaining area of 45.5ha should be upgraded over time to a Native Woodland through the Forest Service's Native Woodland Scheme or Neighbourwood Scheme.

#### **4.9. The recreational and interpretative facilities**

Car parks in general were in excellent condition, well maintained and free of vandalism. Three car parks (Shelton Abbey, Derrygill and Camolin) were kept locked and access was by foot from public road. While this could be seen as defeating the objective of having a car park in the first instance, it must be balanced by the level of vandalism, dumping and unsocial behaviour likely in such areas. The level of vandalism, for instance at Shelton Abbey, has dwindled to zero by virtue of having a locked gate. The opening up of these car parks should be kept under review in the light of such activities.

Almost without exception the facilities and interpretation on site were good, well maintained and showing few, if any, signs of vandalism. Small issues of Perspex cleaning and applying the occasional coat of preservative does not detract from the overall impression of good care and maintenance.

#### **4.10. Overall progress towards the establishment of a native forest.**

The planted sites are, in general, on the brink of establishment. That the established forest ultimately emerging may not be of the species mix originally planted should not be a major issue, assuming that the forest is of native species sourced in Ireland.

Natural regeneration of birch (sally and alder to a lesser extent) is in danger of overwhelming the planted material on many sites. This may not be a major public issue but care should be taken to ensure that, where such natural regeneration does occur, it should not be at the expense of oak where oak was the initial choice and was presumably the species most suited to the site.

#### **4.11. Removal of overhead mature trees**

Some planted sites (Camolin, Ballygannon, Derrygill) have an over storey of mature trees many of which could be removed within the next decade to relieve the younger material struggling in places to get through to better light conditions. It is recommended that a general felling licence be requested on the basis that the removal of such occasional trees is required in the overall interests of the People's Millennium Forests. Such a procedure should smooth the obstacles to a "hands-on-as-required" management procedure. Clearly a ten year programme for their removal or reduction in numbers should be seen to apply only to specific Millennium Forests.

#### **4.12. Management regime**

It will be important to develop a roll-over ten year plan for each sub-compartment to reflect the progress of each species mix. For instance it will be important to answer the following:

- How will the alder and birch be managed?
- Will natural regeneration of oak be encouraged where site conditions allow as part of the species succession in areas dominated at present by birch or alder?
- How will sally, where it occurs, be managed?

These issues should be included in the general felling licence for the areas concerned.

#### 4.13 Digitising and inventory details

All Millennium sites (i.e. planted sites and conservation areas) are clearly demarcated and digitised on Coillte's IT system. Copies of the Millennium maps can be included on the Millennium website showing exact area and species boundaries.

#### 4.14 Long term monitoring plots

Four long term monitoring sites were selected: Coill an Fhaltaigh, Ballygannon Wood, Rosturra Wood and Cullentra Wood – see Dr. Philip Perrin's report dated May 2004. These plots require all non native trees to be removed. This issue was not specifically addressed other than in the overall examination of the sites.

### 5. Public Perception of People's Millennium Forests

There is a somewhat confused public perception of what the project has been trying to achieve. Most public comment is about the tree rather than the forest. Householders – who bother - are looking for their individual tree and this is impacting negatively upon how the public views this project. At one site the audit team met an individual who lived close by and said that he would wait until his tree grew more and, if he could find it, fell it for firewood. While this was a flippant remark it nonetheless reflects a public view that their tree is out there somewhere and is theirs to do what they like with. The certificate sent to each householder could be interpreted to mean just that by virtue of the following inscription on the certificate *“To celebrate the new millennium, a native Irish tree has been planted for ----- at -----“*. The tree number is given on each certificate. There is no mention on that certificate that the tree is part of a forest although the brochure, which went out with each certificate, does hint at it in the phrase *“from a seedling to your millennium forest”*. Regrettably there was no mention of the fact that in the process of becoming a mature native forest, natural selection will reduce the original number of trees planted to about a tenth of those planted. This issue of tree ownership, and indeed ownership of the forests themselves, will remain important in the public's perception of the project.

The audit team recommends that this could be addressed in the following manner:

- Refer to sites as Millennium Forests
- Remove reference to individual trees on website and substitute with term “Forest”
- Change signage to reflect this change as replacement becomes necessary.
- Publish web and brochure material to reflect this emphasis
- Observe a level of maintenance that is above that of conventional forests
- Project the Millennium forests as a positive public education vehicle as well as a shop window for native woodlands and sustainable forest management.

### 6. Conclusion

The project has been a remarkable success considering the limited time scale associated with its commencement, seed collection and production of seedlings. The main objectives are being achieved and should be fully achieved within a decade. Where weaknesses occur they can, and should be, remedied with a renewed commitment to presenting this novel project to a discerning public. Good public presentation is pivotal to a better public acceptance. At some sites better presentation could take precedence over normal silvicultural practice. In time this project will become one of the Millennium's lasting legacies to the Irish nation but will require constant care

and attention. In addition to becoming a social and cultural resource it should also become a renewable wood resource for future generations. In the context therefore of native woodland establishment a decade here or there is not the issue but rather the quality of that legacy.

As the financial resources dedicated initially to this project draw to a close, a longer term financial commitment will inevitably be required to sustain the level of management it requires and deserves. This issue should be addressed and consideration given as to how long term funding can be achieved. The national lottery may well be such a source.

## 7. Acknowledgements

The audit team would like to express its gratitude to the site managers and Coillte Headquarters staff. They have given full cooperation and support for this exercise and have shown considerable forbearance and patience at all stages of the audit.

In addition the audit team would like to thank the staff of the National Parks and Wildlife Service in Killarney for their cooperation and help during the team's visit to Killarney.

A special word of thanks is due to Dr Declan Little of Woodlands of Ireland who developed the criteria by which the sites were assessed.