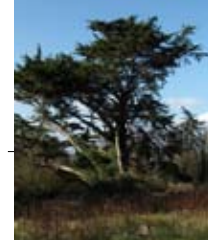


Veteran trees and ancient woodlands in the Republic of Ireland

**Dr Dealga P. O'Callaghan,
FICFor., F.Arbor.A., Chartered Arboriculturist**

Introduction

Occasionally, in the career of a consultant, a different, exciting and interesting project comes along 'out of the blue'. I consider myself to be extremely lucky to have had that happen to me on two occasions. The first was being appointed arboriculturist in charge of the construction of a golf course at Fota Island in County Cork, Ireland. Fota Island is an estate that has remained more or less intact since the Norman invasion of Ireland in 1169 and it is an amazing arboricultural gem that contains a really stunning arboretum.



The second happened in January 2011, when I was asked to appraise the woodlands and amenity trees on the Mount Trenchard Demesne, which is located near the town of Foynes in County Limerick. During my assessment of the trees and woodlands at Mount Trenchard I discovered just how much progressive work has been done in the Republic of Ireland to record ancient and long-established woodlands in the country and the work the Tree Council of Ireland has done to register and catalogue the locations of what it terms 'champion' and 'heritage' trees. I believe that this should be shared with a wider audience.

History of Mount Trenchard

The Mount Trenchard Demesne/Estate is located on the southern bank of the Shannon estuary, 2km west of the town of Foynes in County Limerick, (Picture 1) and it has a long history. It originated in the 17th-century Cromwellian Plantation of the Province of Munster. In 1587, William Trenchard from Wiltshire was appointed 'Undertaker' for 14,000 acres in the town lands of Clonnagh, Kilmoylan, Knockpatrick, Robertstown and Shanagolden in County Limerick. He took up residence in Corrig Castle to the east of Foynes, and of the 14,000 acres he retained 1,500 to himself and divided the remainder among English planters (Hill, 1999).

Mount Trenchard House is thought to have been built sometime between 1740 and 1760 and underwent various alterations and additions during the Victorian era. It became known as the Spring-Rice Estate and one of the owners, Thomas Spring-Rice, was Chancellor of the Exchequer for four years between 1831 and 1834 and was given the title of Lord Monteagle. Mount Trenchard was one of the few big

houses that escaped being burnt down during the Irish war of independence that led to the treaty in 1922 and the subsequent civil war. It remained in the hands of the Spring-Rice family until the Second World War when the Irish Army requisitioned it for the sum of £23 10s 0d (£23.50). After the war the Monteagles successfully sued the military for damages and subsequently sold the estate to Lady Holland. An extract from the Monteagle petition is worthy of quotation here:

'I certainly understood that the woods were out of bounds to troops and must protest at having inexperienced men let loose in the woods when I myself cannot cut a single tree without the permission of the Forrestry [sic] Department.' (The latter point is a reference to the 1946 Forestry Act).

In the 1950s the Sisters of Mercy acquired the estate and ran it as a private school for girls. They extended the complex to include *inter alia* a large 1960s dormitory block, classrooms and a church. Mount Trenchard House became the preserve of the nuns and continued in use as a dwelling.

The present owners acquired the estate in 1996 and have set about restoring Mount Trenchard House (a protected structure equivalent to a Grade 2* Listed Building in the UK) for use as a centre for holistic medicine. One aspect of the conservation plan is to restore the historic approach to the house which was originally from the south side. (In the second half of the 19th century the house had been re-oriented to the north.) As this involves changes to the present grounds and paths and woodlands, on the recommendation of the architects leading the project, the owners appointed me to advise them on the forestry and arboriculture aspects of the woodland, heritage, veteran/ancient and champion trees on the estate.

Survey & Assessment

I made an initial visit to the estate in January 2011 and made a preliminary assessment of the trees and woodlands. At that time I was aware that the Tree Council of Ireland had recorded three champion trees on the estate in its database (Tree Council of Ireland, 2005), as follows:

1. Monterey cypress (*Cupressus macrocarpa*) at 10.84m girth and 23.5m high;
2. Grecian fir (*Abies cephalonica*) at 3.77m girth and 30.5m high;
3. Japanese red cedar (*Cryptomeria japonica*), Ireland's largest group at 15m high.

However, whilst on site I noted a western red cedar (*Thuja plicata*) in the woods that was subsequently measured at 9.48m girth and 27m high (Pictures 1, 3, 4 and 5).

The woodland covers approximately 50ha (120 acres) of the 78ha (168 acre) estate, and walking through it in January 2011, everything about it suggested to me that this could be ancient woodland and had it been located in the UK it would almost certainly have been designated as such. This was the start of the investigation of the status of 'ancient woodland' as a designation in Ireland.

A detailed survey and assessment of the trees and woodlands was undertaken in March 2011. Phill Harris of Bowland Tree Consultancy Ltd undertook the detailed data capture using the Magellan Mobile Mapper CX™ and PT Mapper Pro™ software. The tree and group locations, woodland compartment boundaries etc. were plotted onto a digital map of the estate. The base digital map was purchased from the Ordnance Survey of Ireland (OSI – www.osi.ie) as a 1:2500



2. A view into the Mount Trenchard Estate from the south-west.



Prime Data Vector containing the Irish Mercator Layer and geo-tagged to world x/y coordinates in a Global Positioning System (GPS).

Findings

The survey revealed that there are 13 trees on the estate that can be classified as veteran and/or ancient trees. In addition there are five groups that contain trees that are veteran/ancient. The process of notifying the Tree Council of Ireland of the existence of these trees is in hand.

In addition to the veteran/ancient trees, three champion/heritage trees have been recorded on the estate previously and are listed in the Tree Council of Ireland's database as set out above. These have been re-measured and accurately positioned. The additional tree (*Thuja plicata*) seems to qualify as a heritage/champion tree. Details of this tree have been sent to the Tree Council for inclusion in the database.

A number of important groups of trees were also identified on the estate. These have been classified as 'notable landscape groups'. Two of these groups are (i) a lime avenue which is over 100 years old; and (ii) a copse to the west of the house known to be over 150 years old (Pictures 6 and 7).

The woodlands on the estate are broadleaf deciduous comprised primarily of ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*) and oak both pedunculate and sessile (*Quercus robur* and *Q. petraea* respectively). However, a component of sycamore (*Acer pseudoplatanus*) is becoming established and there is a legacy of *Rhododendron* and cherry laurel (*Prunus laurocerasus*) that dates from late Victorian/early Edwardian times. It has been recommended that the alien and invasive species be removed. The *Rhododendron* poses a particular threat as it is the known host of *Phytophthora ramorum* (sudden oak death).

The woodland is fairly uniform across the estate and as a consequence there is only one compartment. Four sub-

compartments have been identified where conifer planting has occurred within the last 50 years, probably taking advantage of woodland planting grant schemes. Overall the upper canopy of the deciduous woodland is relatively consistent throughout the estate and the presence of the two oak species native to Ireland is significant because there are very few locations in the Republic of Ireland where truly native Irish oak woods are to be found – Muckcross peninsula in County Kerry and the Glen o' the Downs, County Wicklow, for example. It will be interesting to see if the populations at Mount Trenchard are truly native rather than non-native hybrids. If the woods can be shown to be ancient, the case for the oak being truly native is strengthened.

Beech is not native to Ireland but is regarded as naturalised. Beech is tolerated because it forms rich ecological associations and it has been widely grown for timber. However, it does pose a threat to the native deciduous woodland at Mount Trenchard in the long term.

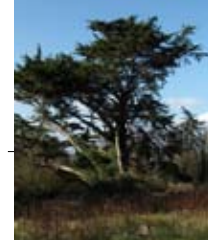
The possibility that the deciduous woods at Mount Trenchard could be ancient was intriguing and that led to a search to see if indeed 'ancient woodland' was a recognised designation in Ireland. The results of the search revealed that the National Parks & Wildlife Service (NPWS) had undertaken a five-year project to define, locate and record ancient and long-established woodlands in Ireland and that 'ancient woodland' is indeed a recognised designation.



3. The Grecian fir (*Abies cephalonica*)



4. The large group of Japanese red cedar (*Cryptomeria japonica*).



Ancient Woodland in Ireland

In Ireland, woodland is classified in Irish Wildlife Manual (IWM) No. 46 (3) as Ancient Woodland (AW); Possible Ancient Woodland (PAW); Long-Established Woodland (LEW I and II); and Recent Woodland. The classifications relate initially to the availability of cartographic evidence of the existence of woodland, and to qualify as ancient woodland it has to be shown that the area has been continuously wooded since 1660. This date is used because in the 1650s two surveys were undertaken in Ireland to establish land use, land value and ownership. These surveys were undertaken to facilitate the confiscation of lands following the Cromwellian conquest and are the two most useful historical sources, i.e. The Civil Survey of Ireland (1654–1656) and the Down Survey (1655–1657). Shortly after 1660 planting of new woodlands by English landowners would have been encouraged with the publication of John Evelyn's *Sylva* in 1664 and therefore 1660 is taken as the definitive date for ancient woodland in Ireland.

IWM 46 (Perrin & Daley 2010) provides the following woodland classifications:

1. Ancient Woodland (AW): Land continuously wooded since 1660 and there is cartographic evidence to support this.
2. Possible Ancient Woodland (PAW): Areas of woodland that are thought to have remained continuously wooded since 1660, but for which the documentary evidence is not strong.
3. Long-Established Woodland (I): Land that has remained continuously wooded since the first edition OS maps of 1829–1844, but for which there is no positive evidence for antiquity in older documentation.



5. The hitherto unrecorded western red cedar (*Thuja plicata*) at the Mount Trenchard Estate.

However, they may have ancient origins.

4. Long-Established Woodland (II): Land that has remained continuously wooded since the first edition OS maps of 1829–1844, but for which there is positive evidence in older documentation that it is not ancient in origin

The earliest historic maps depicting the Mount Trenchard Estate are held in the National Maritime Museum (NMM) at Greenwich, London.¹ Two maps in the Irish Archive at Greenwich, P/49[22] 'Ireland South of Limerick' dated 1590 and P/49[27] 'The Province of Munster' dated 1595, both show the Mount Trenchard Estate established in a broadly similar format as today but occupying a larger area. These maps were made three and eight years respectively after William Trenchard was appointed 'Undertaker' and retained 1,500 acres as his own property. Given the fact that working woodlands were integral to estate life and the cartographic evidence held in the NMM, the initial conclusion was that the woods at Mount Trenchard have ancient origins and should qualify as PAW at least.

This evidence was submitted to the National Parks & Wildlife Service which maintains a database of all known and validated ancient, possible ancient and long-established woodlands in Ireland.

¹ www.nmm.ac.uk/collections/requestHandlers/doQuickSearch.cfm?category=charts&authority=category&searchterm=Ireland

The Project Leader for the Ancient Woodland study is Dr John Cross and he visited the site in June 2011 and made a preliminary ecological assessment to see if any of the known indicator species for AW in Ireland were present (Cross, 2011). He found 13 vascular plants at Mount Trenchard that are significantly more frequent in potentially ancient woodlands/possible ancient woodlands than recent woodlands. He concluded:

'There is strong documentary evidence that the woodlands are ancient and to some extent this is supported by floristic evidence, although rather weaker than may have been expected. This may be due to the abundance and overwhelming dominance of exotic species which pose a serious threat to the long-term survival of native woodland.'

At that point the Mount Trenchard deciduous woods seemed to satisfy the 'possible ancient woodland' designation as had been proposed initially.

Subsequent to Dr Cross's report, a copy of the Civil Survey 1654–1656, and specifically Volume IV that covers the County of Limerick (Simington, 1938), was brought to my attention. This survey confirmed that woodland was present at Mount Trenchard in 1654, six years before the definitive date for AW of 1660. The woods at Mount Trenchard have been in existence continuously since 1654 and are thus ancient woods. The relevant extract from the Civil Survey is set out in the table

This entry defines the precise boundaries of the Mount Trenchard Estate and it is



6. The lime avenue known to be over 100 years old.



interesting to note that the 'lands under wood', i.e. the woodland, is classified as 'unprofitable'. The conclusion from this is that the survey was really only interested in 'profitable' agricultural land and the productive value of woodland for timber was not relevant to the survey. Nevertheless, the survey shows that there were 40 acres of woodland at Mount Trenchard in 1654, which makes them ancient.

Currently the estate has approximately 50 hectares of woodland, so there is still some work to be done to locate the 40 acres that were wooded in 1654 and those which were planted later than that. However, the woods planted post-1654 would likely still qualify as 'possible ancient woodland' and are definitely Long-Established Woods (I) as they are shown in their current form on the first OS Map Series of 1829–1844.

The future

A woodland management plan has been developed that will see the removal of the invasive *Rhododendron* and cherry laurel and the phased removal of sycamore over a five- to ten-year period. The resulting gaps will be planted with native provenance alder, ash, sessile oak and silver birch as recommended by the Irish Forest Service. In the longer term it is planned to selectively remove the large beech trees and plant up the resultant gaps as described above and encourage natural regeneration.

Parish of Robertstowne

The said Parish of Robertstowne containing ten plowlands 12 acres by common estimation mearing¹ on the East with the Pish² [sic] of Killmoylane, on the south with the said Pish of Killmoylane, on ye West with the Pish of Shannagolin on the north with ye River Shannon.

| Names of Proprietors & Their qualifications | Denominations of Lands With their meets & bounds | Number of Acres by estimation | Lands Profitable & their quantitie | Lnds unprofitable & waste | Value of ye whole in 1640 |
|---|---|-------------------------------|---|--------------------------------------|---------------------------|
| John Trenchard English interest | Leakye on pl mearing on the east with Ballyn Craggy, on the south with Cnock patricke, on ye West with Ballynashie, on the north with the River Shannon | 00200 | Arable 00050 Pasture 00050 Meadow 00010 | Under wood 00040 Mountaines 00050 | £ s d 30:00:00 |

1. The term 'mearing' is an old word for bordering on or bounded to.
2. Pish is the abbreviation used for the word 'Parish'.

Further investigations need to be made to try to define the 40 acres that were wooded in 1654. In addition there is an interesting piece of research to be done to determine whether the pedunculate and sessile oak in the woodlands are truly

native. This would involve DNA profiling of specimens for comparison to the known truly native species in Kerry and Wicklow. This would make a challenging honours degree level project.

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7. The copse known to be over 150 years old.

