The Ancient Woodlands of Glenveagh

By Seán Ó Gaoithín / 2021
Glenveagh National Park

Páirceanna Náisiúnta
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What follows is a comprehensive account of what has been recorded of the folk, cultural and natural history of the woodlands of Glenveagh. I have endeavoured to include all the available historic sources and to make these known to the reader. There are currently 24 named woodlands in Glenveagh National Park – the largest being Mullangore. A map showing the locations of the woodlands is included (pages 22-23).

There are estimated to be 36 native tree species in Ireland. Glenveagh has 20 of these present, which is a very good representation. Along with oak, birch and holly, the presence of rare trees such as yew, bird cherry, aspen and rock whitebeam makes Glenveagh a habitat very significant for longterm woodland conservation.

The conservation status of the Glenveagh native woodlands is a major concern. The well-being of the woods is heavily compromised by overgrazing deer and invasion by exotic plants such as ***Rhododendron ponticum, Gaultheria mucronata*** and ***Dicksonia antarctica***. A programme to control the spread of Rhododendron has been carried out by the National Parks and Wildlife Service since the 1970s.

Recorded History

The story of the native woodlands of Glenveagh is a tale of long endurance in this ancient landscape. For thousands of years the landscape of Ireland was covered in a mosaic of forest composed of oak, ash, elm, hazel, yew and other native trees and shrubs, only a tiny fraction of which remains today. The ancient woodlands of Glenveagh are of exceptional cultural and ecological value for this reason. Their conservation is critical to how we understand the story of our natural landscape and the role we 'the keepers of the land' must play in its conservation.

Our earliest historical record describes Glenveagh as a hunting ground, the old gaelic name for the valley is ***Gleann Fada Fán na Sealg***. This translates as ***"the long wandering Glen of hunting"***. Over 400 years ago, Cahir O Doherty is recorded as having taken refuge in the woods of Glenveagh with his rebel army. A later folk song 'Turlough Óg O Boyle' echoes the same theme based on historical characters in the early 17th century. Recorded by Tríona Ní Dhomhnaill the ballad recalls the tragic love between Aileen daughter of Maolmuire and Turlough Óg associated with Doe Castle near Creeslough (it is 13km from Doe Castle to Glenveagh Castle). The lyrics also invoke a wooded landscape and hunting in the wild "***straight grow thy oak, O'Donegal, and straight thy ashen tree" "with ringing cheer to hunt the deer from his haunts in dark Glenveagh".*** It would appear that Glenveagh was originally the hunting grounds associated with Doe Castle dating to the early 15th century.

Throughout history the oak woods of Glenveagh have been referred to as a 'Deer Forest'. This ancient designation has a resonance that has been carried into modern times. To the naturalist and conservationist, the presence of the ancient oak forest at the heart of the Park is what truly distinguishes Glenveagh. There are several indications that the oakwood's of Glenveagh are descended from ancient Irish stock and that the Mullangore area has been continuously wooded since ancient times.

The earliest historical reference to the indigenous woodlands of Glenveagh, in Co Donegal, is by O Sullivan Beare and quoted by John O Donovan in his

OS letters (1835), stating that in 1608, Cahir O Doherty "***concealed himself with much riches in the wood of Gleann Beatha***". O Donovan concludes his letter with "***Gleann Beatha is a grand and picturesque glen…which presents all the appearance of its having once been a forest, and Mullangore wood yet adorns the North Easterly extremity***".

Up until the mid 17th century the western half of Ulster was very poorly mapped, and the lie of the land was poorly understood by outsiders. Map making and surveying was regarded as a colonising activity of the English by the native Irish. The Down Survey of the Kingdom of Ireland 1656-1658 followed 50 years of instability and warfare, the collapse of Gaelic Ireland and the massive social upheaval that resulted from the transfer of lands from Catholic to Protestant ownership. The last of these forests were cleared during the 'protestant plantation' - indeed the Down Survey constantly charts land ownership as 'protestant lands'.

The general map (Down Survey) of the northern half of Ireland gives the first reasonably accurate indication of the lake at Glenveagh bordered by woodlands in the upper reaches of the Owencarrow river system. The surviving ancient woodlands of Glenveagh are remnants of once extensive forests that existed in Ulster.

Down Survey General Map showing lake and woodland (under Ray) at head of river flowing to Doe Castle

The Gaelic origin placenames of Ireland offer insight into the natural history of a locality by naming landmarks such as lakes, rivers, bogs, heights and types of flora and fauna. Local oral tradition maintains that Glenveagh gets its name from the original gaelic for 'valley' ***Gleann*** and the 'Birch' tree, in gaelic ***Beithe***, giving ***'Gleann Bheithe'***, meaning 'Valley of the Birches'. This was later anglicised as Glenveagh.

The Glenveagh 'townland' as a unit of landscape and 'place name' refers a strip of land that extends from the southern end of Lough Veagh following the Owenveagh river southwest to its source on the R254 road and Park boundary. The suggestion here is that Birch was the predominant tree in this townland area. This relatively small area of land and townland name eventually gave rise to the name of the Estate and later to the National Park. The townland of Glenveagh is also the location within which all the early historical accounts occur.

There are several 'oak' place names for Glenveagh National Park, Derryveagh - ***Doire Beatha*** meaning 'Birchy Oakwood' or perhaps Wood of Birch, Derrybeg - ***Doire Bheag*** meaning Little Oakwood, and Derrylahan - ***Doire Leathan*** meaning Broad Oakwood. Derryveagh - ***Doire Beatha*** is the most significant of these place-names as it is also the name for the granite mountain range dominating the Park.

What we find today is a mosaic of oak and birch woodlands scattered around Lough Veagh. It is believed these pockets of native woodland are the remnants of the once extensive oak forests that had persisted in Donegal and indeed throughout Ulster up until the 16th century. Eileen McCracken suggests "the woods surrounding Lough Veagh survived after many others had disappeared".

Eye-witness accounts from 1822 (C. Otway) and Ordnance Survey mapping (J O Donavan) in 1835 confirm the existence of ancient native woodlands in these remote and inaccessible parts of the Glenveagh valley. In his account 'Sketches in Ireland' (1827) Caesar Otway gives a vivid description of the conditions to be found in the Glenveagh area when he visited in 1822.
"***We proceeded to Glenveagh, and at length reached it after a very deep decent. We were delighted with the beautiful water, winding far between***

immense mountains, and apparently without end, loosing itself in gloom and solitariness amidst the distant gorges and defiles of the hills. On the right-hand-side of the lake the mountain rises like a steep wall out of the water, lofty and precipitous, for a thousand feet; and this cliff is the secure eyrie of the eagle and jer-falcon. On the other side the shore was lofty also, and mountainous; but still there was room for the oak and the birch, the rowan and alder, to strike their roots amidst the rock, and clothe the ravines and hollows with ornamental copse wood. The lake was studded with wet woody islands, out of which rose perpendicular columns of smoke, which told full well that in this solitary secluded spot the illicit distiller was at his tempting and hazardous work".

It is worth noting that the active purchase of the estates of Glenveagh, Lough Gartan and Manor Gore from separate owners by John George Adair in 1857 and 1858 for the purpose of forming a 'sport hunting estate' contributed to the protection of the woodlands from further exploitation and ultimately led to their conservation. While there was no increase in the native woodlands since, as evidenced in the 1848 Ordinance Survey, the Adair's did add large amounts of Scots Pine woodland.

In 1867 John George Adair leased the grazing rights of the 25,000 acre estate to John and George Dixon as sheep and cattle pasture for 21 years. By 1891 Mrs Adair ordered the erection of the deer fence (45 km) enclosing a large portion of the estate to contain the newly introduced red deer. The following year, 110 head of Kerry cattle were sold at Letterkenny mart from Glenveagh. This is evidence of increased grazing pressure on the native woodlands. Around this time the Castle Gardens were started and ***Rhododendron ponticum*** was introduced to the woods and garden for colour and game cover. By 1903 the Weekly Irish Times could report "***His Royal Highness the Duke of Connaught…shot three very fine stags in the deer forest at Glenveagh***". As the deer herd increased their overgrazing habits helped the spread of rhododendron through the woods.

Woodland Ecology

Oak as an indigenous tree is well distributed throughout Ireland, with ***Quercus petraea*** mostly occurring on the acidic coastal upland soils, while ***Quercus robur*** is usually found on the base-rich soils of the midlands. Oak populations can be traced along river systems and are associated with water-shed areas. Oaks reproduce from acorns spread by being carried and distributed as a food supply by Jays, Ravens and Hooded Crows. How far can a Jay fly with an acorn before it stops to store it in a safe place as a future meal? We see examples of oak growing from the edge of a rocky incline or exposed boulder. It appears the acorn is deposited or tucked into a space where rock meets surrounding vegetation. It should be noted that most of the natural woodland in this landscape is associated with water courses and rocky outcrops. Indeed, rocky outcrops provide a perch or landing site for birds carrying acorns and it could be in this way that oak in particular is spread and helped to colonise new ground.

The oak woodlands of Glenveagh are part of a landscape-wide distribution of indigenous vegetation. The growing conditions for trees at Glenveagh are very challenging. There is a cold northern aspect to the eastern slopes of the Glen where the main woodlands survive. The soils there are thin and wet and while they are free-draining they are unstable, the terrain is extremely rocky, the cool-temperate climate offers a short summer and growing season. From the 18th century heavy grazing has occurred by goats, cattle, sheep and deer. Evidence of tree felling for charcoal was found to have occurred in the mid 14th century by Michael Telford in the Mullangore area. The remoteness and inaccessibility of Mullangore may well have protected the woods from being over-exploited and cleared. Storm damage continues to bring down mature trees while new trees cannot establish due to ever-present grazing pressure. Hurricane Debbie in September 1961 brought down thousands of trees in Ireland, this included many hundreds of mature oaks in Glenveagh.

While the first OS Survey of 1835 shows the main woodlands of Glenveagh extant, the slightly later revised OS survey of Glenveagh in 1848, gives precise locations for the extent of native woodland cover throughout

the Glen at the time. Remarkably there has been no expansion in native woodland cover in Glenveagh since 1848, and there is some evidence to suggest the woodlands have retreated in places.

There are two predominant native tree species found in Glenveagh. They are the Downy Birch ***Betula pubescens*** which is currently the more plentiful and the oak - ***Quercus petraea*** and ***Quercus x rosacea*** while not quite as numerous as birch is none the less the dominant canopy tree through the Glenveagh woods. In the Irish landscape, Oak as a woodland type is the ultimate expression of vegetation development, while also being the rarest, due to deforestation by this countries inhabitants since Neolithic times.

Our understanding of the native flora of Ireland is constantly being augmented. Henry Chichester Hart of Carrablagh, Fanad, Co Donegal was a celebrated botanist of the 19th century. He published his Flora of County Donegal in 1898 but tragically most of the edition was destroyed in a warehouse fire. However this book remains the only complete attempt at a published comprehensive flora for the county. He uses the classifications of ***Betula alba*** and ***Quercus robur*** for birch and oak as native trees, listing Glenveagh as a location for native Oak.

The most comprehensive recent account of the extent of the wild flora of Donegal can be found in the records of the Botanical Society of Britain and Ireland. The BSBI atlas gives a widespread distribution in county Donegal for three kinds of oak, ***Quercus petraea, Q. robur*** and ***Q. x rosacea***. While ***Q. petraea*** is the most widespread species and dominates the western half of the county, ***Q. rubur*** is found well distributed especially in the east of the county. The natural cross or hybrid form ***Q. x rosacea*** is found throughout Donegal and it is this form that occurs in Glenveagh along with ***Quercus petraea***. The presence of auricles at the base of the leaf is a ***Q. robur*** character while the persistent presence of tiny clusters of stellate hairs on the under-leaf is a character of ***Q. petraea***. Both characters are found together on the leaves of the Glenveagh oaks, giving the cross or hybrid ***Q. x rosacea***. DNA analysis of the oaks in Glenveagh by Dr Colin Kelleher of the National Botanic Gardens has led him to conclude that the majority of the Glenveagh oaks are in fact ***Quercus petraea*** with a proportion being hybrid/ introgressed individuals (***Q. x rosacea***).

The rocky terrain of Mullangore

As a woodland tree, Oak supports a multitude of other species. A great diversity of flora and fauna finds a habitat and food supply in the shelter of oak. Natural woodlands are important refuges for the indigenous plant and animal species. Because of the pressure of the human population and forest clearance for agriculture, native oak woodlands are one of the rarest and most endangered of vegetation types in the Irish landscape.

The biodiversity supported within our native woodlands is unique especially within what is referred to as Atlantic Oak woodland found distributed on the west of Ireland and Scotland. The conditions of mildness and high humidity give rise to temperate "rainforest" conditions. These ancient habitats are especially rich in lichens and bryophytes giving rise to an evergreen epiphytic and ground flora of ferns, mosses, liverworts and lichens.

Of the 50 bird species resident in Glenveagh, about 30 are woodland dwellers, that nest and feed year-round in the shelter of the trees. They include the wren, the most common and easily spotted of wild birds. Long-tailed Tits and their cousins the Coal Tit move about in flocks feeding on insect life in the branches of trees. The colourful Blue and Great Tits nest in woodland undergrowth. There are always Blackbirds and Thrushes, and these are joined seasonally by their cousins the Fieldfare and Redwing to feed on the ripening holly and rowan berries as they ripen in the autumn. More

woodland birds include the Chaffinch and Robin, the Treecreeper that runs around oak tree trunks while feeding, Wood warbler, the smallest of our birds the Goldcrest, the shy ground feeding Donnock and the magnificent Long-eared Owl that hunts up and down the glen, preying upon the Wood pigeon and Woodcock. Jays, Hooded Crows, Ravens, Buzzards, Sparrowhawks and even the Golden Eagle frequent the tree-tops.

When the sun breaks through the clouds and starts to warm the earth the Glenveagh butterflies emerge. Of the seventeen butterflies known to Glenveagh perhaps the most magical is the Holly Blue with its electric blue wings. It lays it's eggs in the flowers of the holly tree and its caterpillars feed on the white holly blossoms. The Speckled Wood is well camouflaged, the Woodwhite flits about woodland clearings, the red winged Tortoise Shell and Red Admiral are common in summer and the instantly recognisable Peacock will be seen perched on a rock basking in the sun. There are two Fritillary species the Dark Green and the Silver-washed, both have speckled orange colouring, their under-wing colouring telling them apart.

There are at least sixty moth species that have been recorded for Glenveagh. They have strange and exotic names like the Elephant Hawk-moth, the Oak Eggar, the Hebrew Character and the Powdered Quaker. They fly at night mostly and provide a ready food source for the five bat species known to Glenveagh.

Bats will roost in old buildings usually in the attic space, they can also be found in large trees, caves and under bridges. At Glenveagh we have five bat species (Daubenton's, Whiskered, Natterer's, Pipistrelle and Leisler's) the other mammals being Red deer, Fox, Badger, Stoat, Mink, Pine Marten, Hare, Longtailed field mouse and Pigmy shrew. All of these find food and refuge in the Glenveagh Oakwood's.

Dragonflies and Damselflies patrol the clearings where they lay their eggs in bog pools. The largest is the Common Hawker and the most colourful are the Large Red and Emerald damselflies. Frogs and lizards share their watery habitat. July and August are good time to see these beautiful creatures.

The mosses ***Sphagnum palustre*** - Blunt leaved bogmoss, ***Dicranum majus*** - Greater forkmoss and ***Polytrichum formosum*** - Bank Haircap Moss - form

carpets on the rocks and lower tree trunks. Through these moss tufts filmy ferns - ***Hymenophyllum wilsonii*** and ***H. tunbridgense*** can be found growing. There is one known location in the glen for the extremely rare Killarney fern. More common ferns readily found in the Glenveagh woods are the Hard Fern - ***Blechnum spicant***, the Hay Scented Buckler Fern - ***Dryopteris aemula*** and the widespread Bracken - ***Pteridium aquilinum***. The liverwort Overleaf Pellia - ***Pellia epiphylla*** is typical of wet shady places such as rocks and around the base of trees, while on the trunks and branches of trees can be found numerous lichens. One of the more readily identified lichens is ***Lobaria pulmonaria*** also known as lungwort, regarded as an old forest indicator and member of the 'Western oceanic' group. Others that are conspicuous include ***Petigera hymenia*** growing on rock and trees, ***Usnea*** growing in pale green mosslike clusters in the branches and ***Graphis scripta*** often found on the smooth-barked Hazel.

The Woodlands of Glenveagh Described

Mullangore Wood (1)

Mullangore Wood is Glenveagh's main wooded area, extending for more than 4 kilometres along the lake. Here the dominant canopy tree is oak, comprising a mix of ***Quercus x rosacea*** (with hybrid characteristics) and ***Q. petraea*** meaning literally "the oak of the rocks" and a name appropriate to species and habitat in the case of Glenveagh. Most of the oaks grow in the steep bolder strewn slopes around the edge of Lough Veagh. The extent of tree-cover in Mullangore is calculated at more than 60 hectares, making these woods one of Donegal's most extensive oak woodlands. At Glenveagh we care for this precious woodland habitat set in a treeless wilderness dominated by blanket bog and wet heath.

Mullangore ***Maol na nGabhar*** is also a townland, which translates as "the bare place of the goats". The recorded lore of place informs us that these

woods gave shelter and food to herds of feral goats in the 19th and early 20th centuries.

In the lower parts of the woods, the trees gain in height due to the greater shelter provided and the better soils. Their straight stems rise to 15m on average.

Lakeside setting of Mullangore Forest

In the root zone we find the humus rich granite soils that are particular to Glenveagh. The underlying bedrock of granite gives acid conditions to the soil. The slow build-up of soil has resulted from deposition of nutrients in the leaf litter in the forest floor over a very long period of time. The woodland soil supports a rich variety of micro-organisms and fungi all contributing to the cycling of nutrients and building fertility. While the depth of soil is very shallow in many parts of Mullangore, the roots of trees can penetrate deep into the sub-strata, to draw on nutrients and provide stability to trees that lean out into the Glen competing for light.

Growing in such a remote and inaccessible place and with difficult terrain, these woods have possibly survived exploitation because there was no road access for timber extraction up to the mid 19th century. The ability to thrive in such an inaccessible place has saved these oak woodlands since ancient times. We have a variety of indicators pointing to the ancient nature of this woodland. The presence of yew trees distributed through Mullangore woods on the eastern side of the lake is one of a number of biological indicators that tell us this is an ancient woodland. The rich bryophyte flora (of

mosses and lichens) and the presence of such varieties of lichen as Lungwort - ***Lobaria pumonaria*** is another pointer that these woods have a long history. Trembling Aspen - ***Populus tremula*** grows in colonies as it suckers rather than seeding itself and is found scattered through the woods growing on the lake shore and occasionally in the upper woods. Again the presence of Aspen is an indicator of an old woodland flora.

The discovery of Wintergreen ***Pyrola media***, a rare and beautiful woodland flower in Mullangore wood within the last 10 years is yet another indicator of the remarkable botanical diversity of this ancient woodland.

Wintergreen, Pyrola media at Glenveagh

Rocky outcrops provide a niche for woodland establishment seeded by bird life carrying seed from elsewhere, such as flocks of visiting Fieldfares and Jays or resident Ravens who are always making their vocal presence felt. Woodland birds help to spread woodland as well as benefiting from the woodland habitat for food and nesting.

The Glenlack stream cuts through the woods giving the sound of constant rushing water filling its deep ravine. There are stepping stones and a 'Sylvan Path' laid out in Victorian times for Mrs Adair that follows the stream to a height where planted fir, larch and beech invoke a feeling of an Alpine forest. Along the stream, mosses form cushions on the shady rocks and carpet the woodland floor. Ferns drape shady nooks. Out of the moss cushions rise the miniature Lesser Twayblade orchid - ***Listera cordata*** which is smaller than a matchstick. The central area of Mullangore Wood is the most accessible

part of the old Deer Forest and it has always been kept open and clear of rhododendron. The combination of big trees and open woodland lending to it the "feel" of a deer forest which usually lacks dense undergrowth, instead it has an open parkland type of appearance. Holly has increased in the woods in recent decades as a result of the limit placed on grazing deer by targeted culling and an enclosing fence erected in the 1980's. Telford noted the relative absence of both Ivy and Holly in the 1970s, due probably to over grazing by farm stock and deer.

On the upper reaches of the Glenlack stream is where the Bird cherry - ***Prunus padus*** is found, a beautiful flowering tree with white blossoms in April and laden with small black cherries in August. By October its leaves turn bright red before being shed. Its presence in the woodland mix is another indication that these are old woodlands in the Donegal landscape. The same species occurs in neighbouring Gartan in old woodland on the approach to Glendowan Chapel.

Prunus padus at Glenveagh

The presence of grasses and heathers in the upper reaches of Mullangore are indicators of a transition from wooded to open heath habitat. Here the trees are shorter with spreading crowns of twisted branches festooned with mosses and lichens.

A big oak that came down in a storm close to the fishing hut – it fell across the 'upper glen road' in the year 2000. A ring count was made close to the stump of the tree that came to 176 – placing the tree as beginning its life back in the 1820's. We have no information on the age of the biggest and oldest of the oaks in Glenveagh and therefore how long they live. My estimate is between 200 and 250 years is the typical life span.

Altachoastia (2)

Below a high point called Altachoastia (we have no translation for the meaning of this placename) is a scattered formation of mini-woodlands of mixed Oak and Birch woodland surrounded with blanket bog and *Molinia* tussock meadows. In this area we can more readily see how woodland vegetation takes advantage of sheltered areas such as rocky overhangs or ravines where shelter is afforded. Here the mosaic nature of the natural woodlands is more pronounced, and we can see a complex interaction between two kinds of flora. These scattered woodlands can be regarded as the extension of Mullangore Wood to the north. First described by Telford in his 1977 thesis, unfortunately much of this area has become infested with non-native plants such prickly heath - ***Gaultheria mucronata*** a species from South America and ***Rhododendron ponticum*** from southern Europe, both of which appear to be spreading rapidly. Recently (since 1995) the tree fern - ***Dicksonia antarctica*** has spread into the woods from the Gardens.

Castle Garden Woods (3)

The 11 hectare woodland garden consists of shelter-belts of Scots pine along the lake shore to the north and south of the Castle and old oak woodlands on the rising ground above the Pleasure Grounds lawn and Walled Garden. Some historical plant introductions to the Glenveagh Estate have proved so well adapted to the conditions of Glenveagh that they have become invasive and threaten to displace the native flora.

The Castle Gardens contain a rich plant collection built up by Henry Mc Ilhenny from 1950 to 1980. In total there are 1,700 different species and varieties of plants introduced to the Garden. Out of these there are about 250 different tree species, about 700 different shrubs and climbers and about another 750 types of herbaceous plants, grasses and flowering bulbs. Combined the plant collection creates a spectacular display throughout the year, the main flowering season being from March through to June with spring bulbs, azaleas and rhododendrons. Colour displays in the Walled Garden are at their best in July, August, and September. Bob Aldwell notes the Castle Gardens as an especially rich habitat for butterflies. The garden

which is managed organically also provides a diverse and safe habitat to nesting birds and small mammals. The kind of horticulture practiced here is one based on ecological principles that are biased in favour of the indigenous biodiversity.

In the tree collection, of note are seven species of ***Nothofagus*** in the Pleasure Grounds area, some fine mature ***Pinus nigra*** (one felled in 2020 had a ring-count of 120 at 2m – giving a planting date of 1890) a very fine Katsura, many ***Eucryphias, Metrosideros***, several ***Eucalyptus***, many Japanese Acers, tree rhododendrons, ***Pseudopanax*** from New Zealand, ***Trochodendron*** from Taiwan, ***Hoheria***, myrtles, cherry species, birch species, rare and endangered trees supplied by the Royal Botanic Gardens Edinburgh's International Conifer Conservation Programme such as ***Fitzroya, Cunninghamia*** and ***Podocarpus***.

The Castle Gardens are the earliest example of an exclosure within the Park. A photograph of the Castle in 1872 shows no garden and scrub oak woodland (max height 5m) on the rising ground above the Castle. This same scrub woodland has matured into high canopy climax forest with a current estimated height of the mature native oaks at 18m in 2021. Many of the mature oaks in the upper garden continue to gain in height. The oakwood's were landscaped with underplanting of azaleas and rhododendron in the upper part of the Garden in the 1950's.

The native woodland flora is a major component of the style of the Castle Gardens. Along much of the Belgian Walk, a woodland trail linking the Walled Garden to end of the Pleasure Grounds, native trees such as Oak, Birch, Holly and Hazel predominate while the carpet flora of woodrush - ***Luzula***, Buckler Fern – ***Dryopteris dilata*** and moss covered rocks pull the ensemble together mixing native flora and introduced garden plants such as azalea and rhododendron in the style known as "Robinsonian Wild Garden".

The woodland fungal flora of the garden has developed very well. Under the pines in the Swiss Walk area there are Milk Caps, Black morels and Golden Chanterelles. In 2020 an Earthstar ***Gaestrum triplex*** was spotted below a pine in the Pleasure Grounds and every year the puffball emerges under the great oak in the Walled Garden. The Wood Hedgehog Mushroom ***Hydnum repandum*** is thriving throughout the Park in a variety of woodland settings.

*Earthstar – **Gaestrum triplex***

The Castle Woods (4)

The Gardens were extended into the Castle woods in 1955. Flights of steps were built leading to a 'woodland well' where the drinking water for the Castle was drawn from. A filtration tank was constructed and finished with a pebble mosaic to filter the water through sand beds and fed by gravity to the Castle. This Well Grove is one of the magical places in the Garden as it is only accessible under very limited circumstances. A canopy of oak and birch creates a shaded interior where there are massive terracotta pots planted with azaleas and banks of ***Rhododendron lindleyi*** and ***R. edgewothii*** giving fragrance to the air in May.

The landscape planting in this new area known as the 'Woods Path' was carried out by Jim Russell. At the same time the gardeners were sent into an area immediately above the Garden fence now called the Mossy Glen where they cleared all the undergrowth in the wood to expose the moss-covered rocks. Using roughhewn granite, a path was laid with steps with the appearance of an ancient construction leading the adventurous visitor to a beautiful stand of native oak. Telford states the "tall oaks here compare favourably with those of Killarney". Here the most ambitious architectural feature in the Garden was constructed, now known as the 67 Steps.

Rhododendron ciliatum from Tibet was planted among the mossy boulders flanking the steps. This "Mayan Temple" like feature leads to a Terrace constructed as a "Belvedere" or viewing terrace overlooking the Castle and lake. In the area of the Mossy Glen is one of the best stands of native oak in Glenveagh.

Set strategically above the Walled Garden and Castle, the 'Belvedere' viewing terrace was made as a viewing platform for Henry McIlhenny's guests. Here birch and oak are the common trees and unfortunately it is in this area that many garden plants are now spreading by seed. These include *Gaultheria, Rhododendron, Gunnera, Dicksonia, Alchemilla, Pseudopanax* and *Myrtus.* The area will require careful restoration to native woodland.

The View Point Path that ascends the hill in the lower Pleasure Gardens, passes the stone pine-apple on a column. In this area woodland regeneration is taking place naturally with willow, rowan, birch and pine spreading. Along this stretch of path both forms of the wild juniper (upright and prostrate) can be seen.

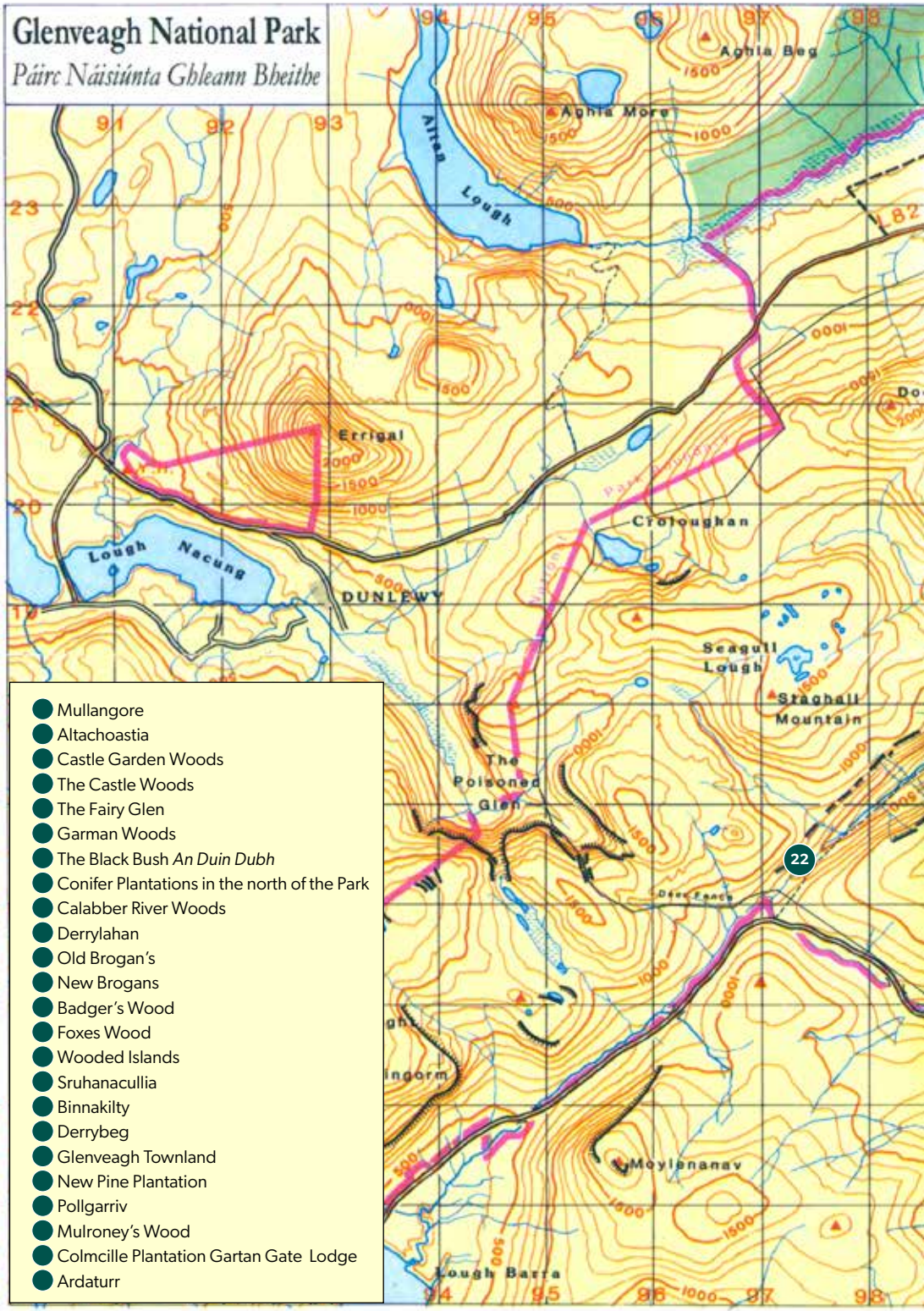
There are three species of native willow that are found in the Park, Goat Willow, Eared Willow and Grey Willow. Willows readily cross with each other so they can be difficult to distinguish as species, and there are many examples of hybrid willows at Glenveagh.

The Fairy Glen (5)

A large area of native woodland associated with the Castle Woods was known to locals as "the fairy glen". This woodland follows a stream that descends from Altachoastia and is readily accessed from the Shore Road. Oak and Birch are the predominant trees, there are also rowan, holly, yew and aspen scattered about. This is the most open kind of wooded area in the Park which offers a richer habitat for butterflies. Some of the ancient, gnarled birch have the delicious mushroom Penny Bun Bolete *Boletus edulus* growing from their roots. Because of their proximity to the Castle Gardens these woods have historically (in the past 100 years) become heavily infested with *Rhododendron* and *Gaultheria* and since the year 2000 with *Dicksonia antarctica*.

Glenveagh National Park

Páirc Náisiúnta Ghleann Bheithe



- Mullangore
- Altachoastia
- Castle Garden Woods
- The Castle Woods
- The Fairy Glen
- Garman Woods
- The Black Bush *An Duin Dubh*
- Conifer Plantations in the north of the Park
- Calabber River Woods
- Derrylahan
- Old Brogan's
- New Brogans
- Badger's Wood
- Foxes Wood
- Wooded Islands
- Sruhanacullia
- Binnakilty
- Derrybeg
- Glenveagh Townland
- New Pine Plantation
- Pollgarriv
- Mulroney's Wood
- Colmcille Plantation Gartan Gate Lodge
- Ardaturr

Cartography- MdeB & MC

Based on the Ordnance Survey by permission of the Government (Permit No. 4160)

New leaves on Aspen in May

Kathleen Ryan, who grew up as a member of the Brady family long associated with the Gate House in the north of the Park remembered as a child knowing the wooded glen found along the shore Road just before the Gardens as the "Fairy Glen".

Percy French visited Glenveagh (1908/9) and penned this rhyme as a dedication

"*For once you herd the fairy bells*
And saw the little shehogues play
And knew at least the magic spells
That lead the lover to Glenveagh.

O Poet, when the touch of Time
Has turned those auburn locks to grey
Still may the Bells of Faerie chime
That once re-echoed round Glenveagh"

A conservation programme is in the planning to restore these wooded lands as native woodland.

Garman Woods (6)

This cluster of mini-woodlands follows the water course of the Garman stream that cuts a ravine below the Lough Inshagh road and emptying into Lough Veagh. The main approach road to the Castle passes through the woods and over a bridge where the branches of oak are swept northeast by the prevailing winds.

Because this area had been fenced off in recent times there has been an expansion of birch regeneration best viewed from the new walkers path. These newly established birch nurseries are easily distinguished as densely packed birch is clusters upwind of older trees that are seeding freely.

Where the new walkers path crosses the Garman stream there is an ancient Juniper that is almost certainly the oldest and tallest of its kind in the valley. It is an example of the upright growing variety of Juniper (***Juniperus communis ssp. Communis)*** with a DBH of 86cm and before it collapsed to its current state would have stood at least 8m tall. These junipers occur on the woodland edge together with yew (***Taxus baccata***) giving a unique character to the woodlands of Glenveagh. Yew is strongly associated with the Birch/ oak woodlands of Glenveagh. Both forms of Juniper are more associated with open habitats. In the cases of both juniper and yew these trees are bird distributed as they both produce edible fruit to birds.

The main part of Garman wood climbs out of a deep ravine where there are well grown oak and the woods continue on the ridge through which the Lough Inshagh road descends. Above the road the woods continue a short distance where they then separate into clumps of birch and rowan. These woods have been recently cleared of rhododendron and now require some follow-up clearing.

The Black Bush *An Duin Dubh* (7)

All visitors to Glenveagh will be familiar with the Black Bush – which is a lone oak growing out of a rocky bank half-way between the Visitor Centre and the Castle. Kathleen Ryan said there was a well near here with good water in it. Tradition among the local people here is that this is a 'fairy tree' and therefore

should not be interfered with. As can often be the case this singular tree is a particularly good seed bearer and regularly produces a good acorn crop. On close inspection we find that this specimen is classed as ***Quercus x rosacea*** because it has the characteristics of the two main forms of oak in Ireland ***Q. petraea*** and ***Q. robur***, a kind of changeling oak.

Conifer Plantations in the north of the Park (8)

Before 1865, the entire area of lands around where the Bridge House, Visitor Centre and Administration Buildings now stand, was open and treeless. The original plantation of Scots and Black Pine (***Pinus sylvestris*** and ***Pinus nigra***) dating to the mid1860s adds to the character of the Park. Jim Brady tells us that "the scotch fir [at Derrylahan] were planted before the construction of the Castle" in 1867. Today the Derrylahan Scots Pine plantation is a fine example of mature Scots Pine woodland. As a plantation it increases the resources of the Glenveagh estate by providing quality timber to replace roofs and floors in the Castle and estate buildings. A sawmill was a feature of Glenveagh estate during the McIlhenny years (1937-83). Long and short eared Owls are known to nest here in Derrylahan. In recent years holly has developed tickets forming an evergreen under-story.

The new Walker's Path from the visitor centre winds its way through this Black Pine ***Pinus nigra*** plantation along the northern shore of Lough Veagh. This scattered planting of pines is evokes a Scottish Highland parkland style landscape assisting in framing the view of the lake and glen.

The more recent coniferous plantations in the area of the Visitor Centre are the least attractive woodlands of Glenveagh. They are of two species of fast-growing conifer Sitka spruce and Lodgepole Pine (***Picea sitchensis*** and ***Pinus contorta***) planted adjacent to the Bridge House, along the Owencarrow river bank and as 'infill' in gaps in the older pine plantations between 1957 and 1963. This 'infilling' has become over-crowded, blocking light and causing dense shade. It is proposed to remove these trees and replace them with native Glenveagh grown trees.

Much of the more recent planting was to provide shelter and screening, it was also at times gap filling where there was some room or where trees had

come down in a storm. The Lodgepole pine is now readily spreading by seed, having crossed the R251 road to Dunlewy on the northern end of the Park. It is naturalised Lodgepole Pine that motorists see when passing the Park on the R251.

Immediately around the Visitor Centre, Administration Buildings and Car Parks was planted with Birch (200 in 1994), Scots Pine (1000 in 1988, 250 in 1994) and Oak (200 Q. petraea in 1988) Alder (200 in 1994). The great advantage to the evergreen habitat provided by these exotic conifers is the ideal nestling conditions for birds of prey like the long-eared owl that nests in these woods.

Around the visitor centre and carpark there is a concentration of birch planting dating to the early 1980's when the visitors centre was first opened. An indication that a woodland ecology is well established is found in the appearance of mushrooms. Trees and fungi have a symbiotic relationship where both benefit from an exchange of nutrients. In late summer and autumn fungi such as Fly Agaric and Penny Bun Bolete (***Aminata muscaria*** and ***Boletus edulis***) spring from the root system of the planted birch.

Calabber River Woods (9)

At the absolute northern extremity of the Park there is a fine stretch of woodland along both sides of the Calabber river. Here oak and birch abound with holly, hazel and rowan. Ivy clambers trees and ferns and mosses fill the shady places. The magic of these woods is that they are untouched by time and are rarely if ever visited by human beings. Deer tracks and evidence of grazing are found within – and yet there is a strong sense of a healthy natural state to the woodland ecology. There is no sign of any invasive species having spread to this area.

Derrylahan (10)

As the name suggests this wooded part of the Park has an open aspect, with low ridges that extend for long distances giving an expansive sense to the lie of the land – hence 'lahan' meaning 'broad'. ***Doire*** anglicised as Derry comes from the word for Oak in Irish. There are free draining glacial moraines in this

part of the Park, giving more suitable conditions for tree establishment. What we find are the remains of what was once a more extensive woodland that is representative of the three species Oak, Holly and Birch that define the native woodlands of Glenveagh.

The effects of overgrazing are especially noticeable here along the nature trail. There is no woodland regeneration apparent, no young trees, it is clear these woods are under immense pressure and are slowly fading away. In 1961 hurricane Debby struck Glenveagh and brought down 200 trees in Derrylahan alone. Many more trees were lost throughout the estate especially on the margins of woods, in this the most destructive of hurricanes to hit Donegal in recent memory.

The remaining Oak trees in this area are venerable in age at over 200 years, they are seed producers yet for future generations of native trees, and it is in this area that woodland expansion has the most potential.

Old Brogan's (11)

This wood gets its name from the last family to have lived in a cottage set on the same ridge as the woods. Blackthorn grows in thickets here suggesting it was planted by inhabitants of the cottage. It may also have been spread here by birds. The oaks here (all perhaps over 200 years old) are all venerable trees. There is no sign of oak regeneration in the area, mainly due to the presence of grazing deer. This area is the natural extension of old Derrylahan.

There is a lot of bracken throughout the Derrylahan area, suggesting that the soil types are suited to the establishment of trees. The flora that grows beneath bracken (primula, viola, oxalis, rumex) is a shade tolerant woodland flora. It may well be the case that Derrylahan once was a broad oak forest and what we see here today are the last remnants of a once ancient woodland.

New Brogan's (12)

This is perhaps the best 'good news story' for woodland at Glenveagh. In the Derrylahan area the good soils and location offer the potential for woodland expansion as can be seen here after 30 years of regeneration. Enclosed by a fence in the 1990's to exclude deer - hazel, rowan and birch

have regenerated with vigour. Distributed throughout are fine multi-stemmed hollies that look as old (perhaps 200 years) as some of the old oaks. There is an occasional young oak growing well which is very encouraging. There is a marked difference between unfenced parts of the Park and fenced areas that exclude deer, we now know that where deer are excluded trees will establish and thrive. And in this location birch, rowan, holly and hazel have regenerated. The ground flora here is also more typical of a woodland carpet layer with oxalis, viola, lysimachia, hypericums, primula, prunella, geranium and gallium all present. Given the opportunity these woods would expand across the entire Derrylahan area.

Badger's Wood (13)

In this half-hectare sized pocket of woodland you get the sense that you are encountering woodland on the edge of its range in this landscape. The weathered and twisted forms of the ancient Holly and Oak tell a story of long endurance, like survivors from a kinder time to trees. This "relic woodland" of mature oak and birch is declining. One by one the trees are succumbing to age and as each old tree dies it leaves another gap in the canopy. The oaks here grow out from crevices in the rocky outcrop, moss-carpets cover the massive boulders strewn around – wood sorrel, navelwort and polypody add to the spartan herb layer. There can be little doubt that these woods are profoundly challenged by overgrazing. The signs of deer, tracks and droppings are throughout.

All these woods in the north-western part of the Park are entirely free of rhododendron and pernettya. Long may this continue. There is one cotoneaster shrub in the edge of this wood.

Foxes Wood (14)

Foxes Wood is similar to Badgers except it is about twice the size of Badgers at one hectare in extent. There is an ancient druidic magical feel to the place. As a woodland it is in better condition with an unbroken canopy throughout. Again we find ancient Holly and Oak. Due to over grazing there is no shrub layer just old trees and herbs clinging to mossy rocks. There is honeysuckle

and ivy clinging to the cliff face. Rare herbs for Glenveagh appear such as Navelwort and Wood-sage. Foxglove and Bracken are more conspicuous. Telford found Wood-millet ***Milium effusum*** here, a rare woodland grass species growing on a boulder.

On the upper edge of Foxes wood there is a colony of about 50 Cotoneaster shrubs established. At some point this exotic garden plant must have been spread in here by birds from elsewhere. This species is not in cultivation at present in the Castle garden. The view from the ridge on which these woods grow is remarkable as it looks across the lake to the Castle.

Wooded Islands (15)

Lough Veagh has a scatter of islands in its northern end, some like Stag Island and Still House Island have a good woodland flora. Several of the islands have had little tree cover, such as Red Island and Bracken Island, however this is changing as whin bushes ***Ulex*** and holly ***Ilex*** grow around their fringes. Smaller rocky islands sport windswept yew trees that are half skeletonised by the gales that sweep down the Lough.

Still House Island has an excellent woodland flora. Perhaps the most beautiful and pleasing of floras in the entire park. Telford describes the island as "the most densely wooded of all the islands today". Trees include yew, oak, birch, holly and willow. Telford found 62 flowering plants together with 6 types of fern – giving the island the most diverse flora in one place found throughout the Park. "Still House Island is the only location for ***Viburnum opulus, Rosa pimpinellifolia*** and ***Lotus pedunculatus*** in the Park".

Stag island has lazy beds made on it and Telford records that it was planted with conifers (Scots Pine) that were felled by hurricane Debbie. It is well covered in bracken and in recent years the Rhododendrons have been cleared. In the past 30 years it has remained un-grazed and therefore has developed a woodland flora with a high proportion of holly and smaller amounts of birch, rowan and willow. In 2018 200 seedling oak were planted through the bracken by Glenveagh staff together with 15 seedlings of Sorbus rupicola (both tree species the seed was collected in the Park, a gesture in memory of Judith Kelleman).

Opposite Stag Island, growing on the lakeshore was a single mature specimen of the Rock Whitebeam - ***Sorbus rupicola*** that succumbed to old age in 2019. Fortunately, it has seeded itself naturally 300m south of the original specimen on the lake edge. Rock Whitebeam is an extremely rare native tree, known only to two locations in Donegal, identified by its elongated leaf which is obtuse at the apex and dense white hairs on the under-surface of the leaf. In 2009 130 trees were raised from seed from the original mature specimen. About 60 specimens are planted along the lake edge in the Castle Gardens acting as a seed reserve for this fascinating and extremely rare native tree.

Lough Inshagh islands – Telford took a look at these and reports in his 1977 Thesis. There are three wooded islands on the lake, with a similar tree composition to Still House Island except for the absence of Oak and the presence of Alder on the largest island. He notes Royal Fern, Bog Myrtle, Honeysuckle and Ivy from the shore looking across at the densely wooded island.

Sruhanacullia Wood (16)

This small wood opposite the Castle on the far side of the lake, consists of about 1 hectare of trees enclosed by a fence in 1975. The private woodland survey described it as "broad high forest" with a dominance of oak and lesser amounts of birch and holly. Hazel is very rare and yew absent as in all woods in the north east of the Park. Most of the oaks were lost in hurricane Debbie in 1961.

There has been a marked regeneration of the birch here with the trees advancing to the fence in the lower reaches of the enclosure. Unquestionably this is the clearest evidence we have that excluding deer promotes the establishment of trees and in time expansion of woodland. Indeed the very high deer numbers are preventing the return if the native trees to the lower elevations of the Glenveagh landscape.

Sruhanacullia is the anglicisation of ***Sruthán na Coille/Cuileann***, meaning the stream of the woods or the stream of the hollies. I believe the latter is the more accurate in this case as ancient Holly trees grow throughout the

Glenveagh valley especially in the Derryveagh area. Despite over grazing by deer, holly persists and will thrive where grazing deer are excluded. Holly is one of a trinity of trees that characterise the woodlands of Glenveagh, oak, birch and holly as a vegetation type. The seed of holly is readily spread by birds that feed on its fruits in the autumn. There are now large amounts of holly in parts of Mullangore wood and as an understory in the Derryveagh pine plantation. The regeneration of holly in the woodlands of Glenveagh is a very positive development as holly will supress the regeneration of ***Rhododendron ponticum***. New thickets of holly are an ecological ally in correcting the balance in favour of healthy woodland structure.

Binnakilty (17)

Also known as the Waterfall Wood, these woods have receded considerably since the 1906 OS edition. The earlier survey of 1848 show a wooded area twice its current extent. Spread out over an area of 2 hectares along the lake shore the remnants of the wood consist of Birch and Oak with some rowan, holly, alder and aspen are present. Telford noted no hazel growing in this area. Bracken has become dominant, with Molinia tussock vegetation merging into the wood.

This woodland is one of the most inaccessible (for people) areas of in the park, with no crossing points on the Owenbeagh river at this point and with the Derrybeg raised bog to cross, there is no easy access.

Derrybeg (18)

Derrybeg wood at 2.3 hectares is well preserved and is in good condition as it has been saved from over grazing since it was fenced in the 1980's. Dominated by Oak there are also birch, rowan, holly and hazel. Because this woodland was enclosed with a deer fence there has been an increase in Birch, Hazel and Holly. The ground flora includes ***senecio jacobea, salix, corylus, prunella, primula, lysimachia, veronica*** and ***Carex pallescens*** merging with ***Molinia*** tussock vegetation. Several species of the Liverwort ***Frullania*** cover the trucks of oak, indicating they are more suited to the exposed and brighter conditions on this side of the Glen.

Derrybeg Wood and Binnakilty Wood viewed from across the lake

Glenveagh townland (19)

What is referred to as the "head of the Glen" and the upper Glen is in fact the southern end of the valley and the original Glenveagh townland. Nearly all the trees that grow here are planted – they include Beech, Elm, Yew, Ash, Larch and Scots Pine. While some of these planted trees date from the 1840s there were additional plantations made by the Adairs from 1860 to 1900. An extract from "the Parliamentary Gazetteer of Ireland Vol. 3" (1846) states a "*Mr Foster of Ballinure, near Clones has built a small lodge in Glenveagh, made a road hither from Glendowan, planted part of the shores of the lake, and stocked the green hill-screens of the glen with flocks of sheep and cattle of the Argyleshire breeds*". The planting may refer to the Scots Pine planted along the lakeshore at Mullangore, and/or it may refer to planting of Beech and Larch in the same area. The OS survey from 1848 shows a

woodland plantation next to Glenveagh Cottage – this suggests the beech growing here presently date to the 1840's. The 1906 OS survey shows an additional linear plantation on the NW side of the Owenbeagh river opposite Glenveagh Cottage.

The 'Waterfall Cottage' was under construction as shown on 1848 OS where the foundation of the building is shown on the map. According to local tradition (Willie Brady) "the Adairs stayed here while the Castle was being built". This makes sense as the location and view from the site is very fitting. The 1902 OS map shows the same building as roofed and in use but with no tree planting around it. This suggests that the sycamore growing around the house were planted in the early 20th century.

Ash appears to be an introduced tree in Glenveagh, here in the area of Glenveagh Cottage and in the Castle Gardens. Ash dieback disease was first noticed in the Castle garden area in 2000, sadly we may loose all our ash as there are no controls for this fungal disease.

New Pine Plantation (20)

Between Glenveagh Cottage and the Stalking Hut is a walled-in piece of land that will be planted with 2000 native Irish Scots pine in 2021. These trees were grown from seed by Bernard Carey of Mount Shannon, under licence from NPWS. Telford in his extensive study of the vegetation of Glenveagh found evidence of the widespread establishment of "Scotch Fir" in the lands of the Park and most interestingly radiocarbon dates from two locations at Derrybeg and Devlin give a carbon date of 3900BP. For many years botanists have worked with the assumption that ***Pinus sylvestris*** had died out as a native tree in Ireland by 1500 and that all the Scots Pine seen in Ireland today are introduced and descended from planted trees originating from Scotland.

This assumption has been over-turned by recent investigations. A continuous presence of Scots Pine has been found in the pollen core samples taken from the Rock Forest core site on the edge of the Burren National Park in Co Clare. The scientists (Prof. Fraser Mitchell, Dr Jenni Roche and Alwynne McGeever) working on this investigation have concluded that the existing population of 143 trees is a native population. Unpublished genetic analysis by Colin

Kelleher at NBG Glasnevin of material from the Rock Forest trees indicates these trees "differ from elsewhere". Ongoing investigation will shed new light on our growing understanding of our native trees.

The Glenveagh Scots Pine conservation plantation is most significant as it is the largest new planting of indigenous scot pine to be planted to date. These trees will grow into a mature seed bearing population in 15-20 years and will thus provide for the long-term conservation of this extremely rare and precious tree species. The location was chosen so that these trees can cross-pollenate freely to produce pure seed. To facilitate this the mature scots pine in the immediate vicinity of the plantation will be removed several years prior to seed collection on site.

Pollgarriv (21)

This 'scrub woodland type' caught the attention of Telford. He estimated an area of .6 of a hectare as 'wooded' and describes it as "***an area of heath with many Sorbus and Ilex in a ratio of 3:1 scattered very thinly over a wide area. The Ilex appear to be a lot older than the Sorbus".*** The 1848 OS survey gives indication of significant amounts of scrub woodland cover (c3ha.) in the Pollgarriv area.

Telford continues ***"Local knowledge gives it that at the beginning of the century very tall stands of Calluna clothed this upper Glen, it was much prized for its grouse shooting. 1907 a massive fire burned the whole of the upper Glen***". 30 years previously, in 1874, J G Adair was in court restraining his tenants John and George Dixon from burning the "Long heather" on his lands near to Glenveagh Cottage (Londonderry Sentinel Dec 3, 1874). The "Long Heather" was 6 feet high and prized for grouse shooting at the time.

Telford was also told "***The O Doherty's lived near here before and around the turn of the century***" More recently the area has been heavily grazed by sheep and deer. An exclosure fence was erected in the early 1990's to exclude deer and as a measure to determine would woodland scrub regenerate here. Two small sample exclosure's demonstrate scrub woodland does regenerate to the south of the main exclosure - with birch, holly and rowan creating a canopy and a shrub layer of heather growing to 1m high.

Mulroney's Wood (22)

Found at "the head of the Glen" and at .7 of a hectare, this wood grows in similar conditions to Badger's and Foxes woods. Telford describes it as a "scrub wood rich in species, dominated with oak and birch" "The private woodlands survey 1972, describe this wood as pure birch scrub which is evidently a mistake". Aspen, hazel, rowan and holly are present. There is also a cave known as Mulroney's Cave, recalling a hermit who is believed to have lived in the cave above the Stalkers Hut on Staghall Mountain. Both cave and wood preserve his memory. Mickey Blake (a collector of local lore) described Mulroney as "some kind of religious figure" who is believed to have lived in Glenveagh in the 1700's.

Colmcille Plantation - Gartan Gate Lodge (23)

In 2011 a mixed woodland (.25 ha.) of native oak (300) and Scots pine (300) was planted by the Garden staff, sponsored by the Vodafone Tree planting Project at the time. The Oak were supplied by Annaveagh Nursery, the provenance of the oak is Coolattin Oak Wood in Co Wicklow. At the time we were told the Oak are ***Quercus petraea***, however they appear to have ***Q. robur*** characteristics. The ground was drained and mounded, trees were planted on mounds and no further maintenance has been carried out to date. A thinning in favour of the oak will be required when the canopy has closed in. The Oaks are a fitting as a dedication to the memory of St Colmcille whose birth place is close by.

Ardaturr (24)

On the South-eastern edge of the Park is a stretch of land connecting the Park to Lough Gartan. Here there is a fine natural woodland (c.7 ha.) of Birch and Oak. There are also Beech trees planted in a section of rising ground near to the lake that may need to be removed before they regenerate and displace the indigenous oak. Like so many woodlands throughout the area there is evidence of overgrazing by deer, which move freely through this area.

Conclusion

In total there are estimated to be about 220 hectares of woodland in Glenveagh National Park, 200 hectares of which are native woodlands. A Woodland Management Strategy focused on the conservation of existing native woodlands and their expansion is currently being drafted. A positive conservation outcome will require a long-term commitment of resources to effectively reduce deer numbers and the ongoing control of invasive plant species. The most important of our woodlands is at Mullangore and will be the chief focus of our conservation efforts in the coming decades. In the native woodlands in and surrounding the Castle Gardens area, an intensive ecological restoration will also be required, and conditions created to restore and manage the woods as high quality native woodland.

Our woodlands at Glenveagh have endured for centuries. The woodlands will continue to support the greatest share of the biodiversity the Park has to offer. In these times we continue to learn about the significance of our native woods and the essential role trees play in making our world a safer place.

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Glenveagh Native Trees

Irish Oak	*Dair ghaelach*	*Quercus petraea*
Downy Birch	*Beith chlúmhach*	*Betula pubescens*
Holly	*Cuileann*	*Ilex aquifolium*
Rowan	*Caorthann*	*Sorbus aucuparia*
Goat Willow	*Sailchearnach*	*Salix caprea*
Eared Willow	*Crann sníofa*	*Salix aurita*
Grey Willow	*Saileach liath*	*Salix cinerea*
Rock Whitebeam	*Fionncholl creige*	*Sorbus rupicola*
Blackthorn	*Draighean*	*Prunus spinosa*
Bird cherry	*Donnroisc*	*Prunus padus*
Wild cherry	*Crann silín*	*Prunus avium*
Hawthorn	*Sceach geal*	*Crataegus monogyna*
Hazel	*Coll*	*Corylus avellana*
Alder	*Fearnóg*	*Alnus glutinosa*
Ash	*Fuinnseóg*	*Fraxinus excelsior*
Aspen	*Crann Creathach*	*Populus tremula*
Yew	*Iúr*	*Taxus baccata*
Prostrate juniper	*Aiteal*	*Juniperus communis nana*
Upright Juniper	*Aiteal*	*Juniperus com. ssp communis*
Scots Pine	*Giuis*	*Pinus sylvestris*

Sessile Oak
Dair Ghaelach
Quercus petraea

Downy Birch
Beith chlúmhach
Betula pubescens

Holly
Cuileann
Ilex aquifolium

Rowan
Caorthann
Sorbus aucuparia

Rock Whitebeam
Fionncholl creige
Sorbus rupicola

Eared Willow
Crann sníofa
Salix aurita

Sally
Saileach liath
Salix cinerea

Goat willow
Sailchearnach
Salix caprea

Blackthorn
Draighean
Prunus spinosa

Bird Cherry
Donnroise
Prunus padus

Hazel
Coll
Corylus avellana

Hawthorn
Sceach geal
Crataegus monogyna

Alder
Fearnóg
Alnus glutinosa

Ash
Fuinseog
Fraxinus excelsior

Wild Cherry
Crann Silín
Prunus avium

Aspen
Crann Creathach
Populus tremula

Yew
Iúr
Taxus baccata

Prostrate Juniper
Aiteal
Juniperus communis subsp. nana

Upright Juniper
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Scots Pine
Giuis
Pinus sylvestris

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