



## Irish Forestry Unit Trust

<b>Clonad MU</b>
Tullamore, Co, Offaly
<b>MANAGEMENT PLAN</b>
<b>2023 – 2042</b>
<b>(Plan Period: 2023 -2027)</b>

## **GENERAL INTRODUCTION, OWNERSHIP AND LANDUSE HISTORY.**

Clonad Management Unit (MU) comprises of a Clonad which is a central block (142.4Ha.) with 8 smaller outlying blocks (71.1HA.). Total in this MU is 309 ha which includes Clonagh and Kilduff forests also. Clonad wood has a diverse range of conifer species and broadleaf planting mixtures.

The original land use was agricultural/forestry use with neighbouring peatlands used traditionally for energy resource and a source of employment through extraction of peat for power generation. Historically Clonad property formed part of Charleville Estate owned by Lord Tullamore.

### **Properties:**

1. Clonad 213.5ha. Established in 1994. The forest holding was transferred from AIB in 1994 on the setting up of IForUT.

### **New property to be added:**

2. Clonagh 19.2ha. Established in 1999. [REDACTED]
3. Kilduff 76.3ha. Established in 1995. [REDACTED]

### **Elevation**

- Ranges between 75m to 100m

### **Statutory Land Designations**

Clonad Wood pNHA (refer appendix 3)

The main block of Clonad Wood is designated as pNHA (proposed Natural Heritage Site - Code 000574) by the NPWS. This designation is for Ancient Woodland or Possible Ancient Woodland based on desk-based research. At the time of the planning of the Tullamore bypass the NPWS carried out a survey all woodlands in this area to determine if any were of sufficient value to add to existing woodland SAC in the Charleville Estate.

Hawkswood Bog NHA (refer appendix 4)

The raised bog to the east and directly adjacent to the main block of Clonad is Hawkswood Bog (NHA Code 002355).

Screggan Bog NHA (refer appendix 5)

Ross Wood (Compartment 981001) is part of the Screggan Bog NHA (Code 000921), which is also a midlands raised bog.

**Water/Fisheries Sensitivities:**

This MU lies within Barrow Main, Barrow/Owenass/Triogue, Boyne Upper, Brosna, Figile, Hind/Lough Ree, Inny, Little Brosna and Lough Derg water catchments. Refer to Map 9.

**Margaritifera (Fresh Water Pearl Mussel)**

There is FWPM in the Clonad MU - Catchments with previous records of Margaritifera, but current status unknown.

**Old Woodland Sites (OWS):**

1st edition OS maps show woodland cover over the whole area except for 98107T (Map 7a). Two additional small areas are shown on the 3rd edition OS maps. Of the total forest area, 200.4ha (94%) is identified as LEW (long established woodland) and 1.5ha (1%) as RW (recent woodland). Refer to Map 7a.

An Old Woodland Survey was carried out by [REDACTED] during November 2020 in order to identify areas of highest value to be converted back to OWS. Following this the Long-term Restructuring Plan (Map7) was amended in accordance with IForUT's policy on OWS as stated in FMM 4.1.7. The main block of Clonad was surveyed in detail, in addition to all smaller outlying forest blocks. Overall it was found that the current site characteristics are unrecognisable from the 2009 Site Synopsis for the Clonad Wood pNHA, which stated that the canopy was dominated by Pedunculate oak, underplanted with beech and conifers, with a rich understory.

In the main block, trees that pre-date the present conifer planting are rare and are mostly confined to the public roadside, along the perimeter, and several small areas all currently described as NRB. Soft deadwood stumps from previous forest cover are very common throughout the forest, and are often large diameter and of good quality, while fallen large diameter deadwood is very rare. There are two high quality linear Woodland Features (about 600m) with deadwood and semi-natural cover, these have been marked as non-recorded features on GIS, along with two badger setts and an area of flushes. There are also two streams, 600m of interior woodbanks, and Irish Whitebeam on the woodbank perimeter. Ground flora is generally poor but with local hotspots; 17 Ancient Woodland Vascular Plants (AWVP) were found in total. Shrub layer is poorly developed; notable are Bird Cherry, Alder

Buckthorn, and some large Hazel bushes. The woodland fungus community is of particular note, and conservation of best areas should be considered in future management planning.

Of the other blocks surveyed, Derryad Wood is the most valuable as it contains 130 year old Pedunculate oak canopy, likely a remnant of what was previously over the main block of Clonad. Deer grazing is a threat, biodiversity feature is hedgerow on south boundary with 2 Irish Whitebeam. Derrybryan has few old woodland features of note. Derryclure Wood main biodiversity feature is the wet area with a stream linking spring with a pond. To improve OWS in Derrygolan it would be an option to join two areas of mapped NRB together after harvesting in 2014. Due to ringfort (recorded) in Derrygunnigan this half of the property has already been planned to revert to broadleaves in the next rotation. Ross Wood is a NHA and has several rare Alder Buckthorn which should be protected (locations given) and is currently under long term rotation with both NRB and NRC. Finally, Mahon's Wood has no old woodland features of note apart from some deadwood.

**Archaeology/Historical/Cultural:**

Two recorded monuments exist within the forest boundaries (Refer to Map 4) - one is classified as an Enclosure (OF025-006) – identified off aerial photography but not ground checked. There is also a recorded Ringfort-rath (OF025-022) in the southern half of Derrygunnigan Wood. Numerous non-recorded features of ecological, cultural and environmental value have been identified which mostly centre along the River Clodiagh, and throughout the Clonad Wood and Derryad Wood. Refer to Map 4. These features are recorded on the 'Sites and Monuments Record' (<https://maps.archaeology.ie/HistoricEnvironment/>).

The Forest Service gives advice on protection and outlines mitigation measures when IForUT applies for a license to carry out any harvesting operation in the vicinity of any monument. Also, as standard procedure, any old farmhouse/cottage or other buildings and stone walls/significant ditches are considered as more recent cultural heritage and are protected during harvesting and roading operations.

**SOIL TYPES.**

Soil types vary from mineral gley on upper slopes to brown earths with high humus content on the lower slopes particularly in the LEW OWS areas ( refer map 7a). Description: Majority of the MU contain - Deep poorly drained mineral. Derived from mainly calcareous parent materials with surface water Gleys, Ground water Gleys. Source: IFORIS NET

## **SUMMARY OF THE LANDSCAPE VALUE OF THE FOREST.**

**Low Felling Impact with High Afforestation Sensitivity** The landscape character is classified as HIGH within the Offaly CDP (2014-2020) in this MU. The topography of the landscape is mostly Flat and undulating but due to the historical character of the woodlands including the heritage value this is where the forestry is mostly appreciated for in terms of landscape. This review is cognisant of the HIGH landscape classification and the proportion of forestry reaching maturity within the timeframe of the review of this plan. The review has considered the age, diversity, species and structure of Clonad MU and emphasis has been put on spacing out timing and restructuring of the woodlands.

Clonad is located in a low lying predominately sparsely populated rural area. The surrounding landscape is typical of a mix improved grassland and bog. The River Clodiagh its treeline is a significant feature in the landscape. Clonad is located beside Charleville Estate which comprises of mainly broadleaf woodland.

The mainblock is dissected on the western side by the R421 (Tullamore – Kinnitty) and through the middle by a minor public road. Several of the outlining blocks are visible from the N80 (Tullamore/ Portlaoise) and 98106B bounds directly onto it.

Numerous private dwellings are located around the individual blocks and the woodland overall has a high heritage and cultural value.

The Felling Plan (Map6) has a balanced coupe size and felling sequence to diversify the unified age structure. Coupe separation has also been applied to mitigate felling impact. Numerous and sporadic mature broadleaf trees are located throughout the conifer woodlands and will be retained as standard practice to further to further mitigate felling impacts. The retention of all broadleaf trees and specimen conifer trees will significantly add to the landscape and structure diversity of the Long-term Restructuring Plan (Map7).

## **MANAGEMENT OBJECTIVES.**

- 1) To maximise economic output from the forest at local and national level.
- 2) To manage FMU in accordance with the principals of the Forest Stewardship Council® (FSC®) and international benchmarks of the Programme for the Endorsement of Forest Certification Schemes (PEFC).
- 3) To manage timber production in a sustainable way.
- 4) To maintain and enhance the landscape value of the forest.

- 5) To protect existing biodiversity and where opportunities arise enhance and further promote new biodiversity.
- 6) To manage forest activities with due regard to local, regional, and national stakeholder interests.
- 7) To promote continuous professional development at management level.

(IForUT's FSC licence code : FSC-C003194)

#### Summary of silvicultural systems to be used.

System	Conifers	Broadleaves
Clear fell	✓	
Selective fell		
Thinning to MTI	✓	
Line thinning only		
Non thin regime	✓	
Non intervention		✓
Natural regeneration		✓
Replanting	✓	✓
Other		

### 5 Year Monitoring Report Summary. Clonad MU

	Objective	Was it achieved?	How was this information applied to 5-year Management Plan review?
1	Economic Return	Within the plan period, clearfells have occurred in 200, 2012, 2014 and 2018. The thinning operations have yielded income and increased crop quality and value. All crops have remained stable and continued to put on increment and increase in capital value.	A reviewed felling plan (Map6) has been prepared during the plan review. The latest thinning has occurred in 2017. Significant clearfells were planned for the previous 5 year phase but this was changed following a review during the planning period 2018. The clearfell in the 2018 was particularly high quality and achieved a high market threshold rate.
2	Certification Standards	Certification standards and IForUT systems applied over plan period. Managers working off FMM	Continue as before and update FMM as required.
3	Timber production	4 clearfells of high quality timber and numerous thinning operations over the first plan period. Crop measurements were carried out in 2014 and 2017.	<p>The long term production and felling rates for Clonad has been reviewed, particularly given the narrow age distribution of the 1st rotation crop and habitat values for red squirrel and pine martin. Long term felling plan (Map6) has been produced for this Clonad MU which demonstrates FSC compliance. The aim is to restructure and diversify the canopy and the age classification of the wood as an entirety.</p> <p>An inventory and plot taking is to be carried out by ██████████ in December 2021 and this may result in map changes, plots and the need to revise all maps accordingly.</p> <p>Clonagh is on a deep peat and it took a long time for the canopy to close. No further thinning to be done here.</p>

4	Landscape	Two new landscape layers added to designations GIS layer. Forest Service layer taken off National Development plan for new planting and Landscape Unit appraisals based on Coillte LUs.	All blocks are categorised as low apart from compartment 98105G which is categorised as moderate according to FS landscape categories.
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5	Biodiversity Enhancement	Good site knowledge gained from site supervision and greater detailed recorded on GIS and Forest Records database.	<p>Plan review has applied greater detail in biodiversity mapping. Hazards &amp; Sensitivities Maps now includes these areas. Continue to protect and enhance these areas and positively incorporate in the future restock plans. Areas of most value have been managed as non-intervention by and large. However there was an area converted back to BHF through targeted conifer removal during previous plan review period. Old Woodland Assessment was carried out by [REDACTED] in the previous 5 year period. A further assessment will be carried out in 2021 by [REDACTED].</p> <p>The clear felled areas have now increased open space due to an extensive archaeological plot. Also increased broadleaf's along the edge rows which are being browsed by Hare's. So continued monitoring and maintenance needed. Retained broadleaf's on site are structurally in situ.</p> <p>Bees have been introduced to the wood and [REDACTED] is the caretaker. No spraying is key and ground vegetation will be carried by manual cleaning to facilitate the bee-keeping. Plenty of evidence of browsing red squirrel through the mature canopies and one actual siting was observed on the 3rd March 2021.</p> <p>The OPW have cleaned the River Clodiagh banks in Jan 2020 which involved excavation machines cleaning a path parallel to the river itself. Some broadleaf trees and vegetation were removed. The vegetation has greened over subsequently. IForUT have engaged with OPW over this activity and requested they consider the ecology</p>
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			of this environment and inform IForUT of any further works ahead of time and what works are involved. Refer to 365 for the email thread. It is unclear at the moment if areas of ash in the FMU have been affected by Ash Dieback. It is anticipated that this will become infected sooner rather than later. This will be monitored going forward.
6	Stakeholder	Generally good relations with neighbours achieved by Forest Manager and caretaker. No complaints received to date or issues raised on Issue Register.	Up to date record of stakeholder contact details. No stakeholder feedback from plan review consultation. Continue with local consultation prior to all harvesting activities as before.
7	Professional Development	Clonad is managed by [REDACTED] while the other properties are managed by [REDACTED]. Has demonstrated good knowledge and awareness of certification compliance. Manager inducted into Microsoft 365 cloud.	Manager fully utilising [REDACTED] for hosting FMM documentation and recording of forest records. ITGA field days have been hosted over the previous 3 years at this property. Topics covered involved Forest Certification, Forest Food, Forest Ecology, and all were open to the general public and the Forestry Sector. The SIF (Society of Irish Foresters) awarded CPD points for those who attended the events.

8	Forward Planning	4 clearfells in Clonad of high quality timber and numerous thinning operations over the first plan period. Crop measurements were carried out in 2014 and 2017.	<p>The long term production and felling rates for Clonad has been reviewed, particularly given the narrow age distribution of the 1st rotation crop and habitat values for red squirrel and pine martin. Long term felling plan (Map6) has been produced for this Clonad MU which demonstrates FSC compliance. The aim is to restructure and diversify the canopy and the age classification of the wood as an entirety.</p> <p>An inventory and plot taking is to be carried out by [REDACTED] in December 2021 and this may result in map changes, plots and the need to revise all maps accordingly.</p>
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