

## Irish Forestry Unit Trust

### Stacks Mountains MU

Abbeyfeale/Stacks Mountains, Co Kerry

MANAGEMENT PLAN

2025 - 2044

(Plan Period: 2025 - 2029)

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

Stack Mountains Management Unit (MU) comprises thirty-nine properties totalling approximately 1,154.60 Hectares. This MU is based on geographical location as all blocks are in the same locality of North County Kerry, mostly on the upland area of the Stack Mountains, to the north of the town of Stacks Mountains, and to the north/northeast of Tralee. Several properties are at lower elevations on the western edge of the Stacks such as Derryvrin and Cahercullenagh Lower. There are three properties located to the east and north of the town of Listowel. In general, most of these properties were previously a mixture of rough grazing land and upland bog, with some sections of former cutaway blanket bog.

#### Forest properties being reviewed:

- 1. Pilgrim Hill 27.18ha. Established circa 1995.
- 2. Cahercullenagh Lower 1 57.93ha. Established circa 1990.
- 3. Carrigcannon 39.66ha. Established circa 1990.
- 4. Glashanacree 39.94ha. Established circa 1990.
- 5. Rylane 23.09ha. Established circa 1989.
- 6. Tooreen Duagh 33.83ha. Established circa 1989.
- 7. Lyracrumpane 60.98ha. Established circa 1991/1996.
- 8. Tooreen Kilflynn 36.23ha. Established circa 1992/1993.
- 9. Tooreen Kilflynn 2 29.46ha. Established circa 1992/1993.
- 10. Tooreen Kilflynn 3 71.45ha. Established circa 1990.
- 11. Derryvrin 31.34ha. Established circa 1986.
- 12. Dromada Mor 42.23. Established circa 1987/1989.
- 13. Knockmeal 20.61ha. Established circa 1986.
- 14. Gortclohy 94.68ha. Established circa 1987.
- 15. Knockalougha 20.82ha. Established circa 1986.
- 16. Cappagh 17.60ha. Established circa 1995.
- 17. Knockmeal 2 12.38ha. Established circa 1989.
- 18. Knockalougha 2 21.40ha. Established circa 1989.
- 19. Glashananoon 20.11ha. Established circa 1989.
- 20. Glantaunyalkeen 19.11ha. Established circa 1994.
- 21. Knockalougha 3 156.52ha. Established circa 1995/1999.
- 22. Tooreen 40.86ha. Established circa 1992.
- 23. Banemore 13.86ha. Established circa 1999
- 24. Cloghanenagleragh 25.61ha. Established circa 1998.
- 25. Feavautia 5.74ha. Established circa 1996.

- 26. Gortclohy 2 26.03ha. Established circa 1998.
- 27. Knocknagashel West 19.98ha. Established circa 1997.
- 28. Knocknaglogh 5.93ha. Established circa 1994.
- 29. Leath East 36.18ha. Established circa 1994.
- 30. Tooreen 2 10.80ha. Established circa 1995/1997.
- 31. Bunnaruddee 22.74ha. Established circa 2015.
- 32. Meenbannivane 14.67ha. Established in 2020.
- 33. Knocknagashel West 3 7.60ha. Established circa 2010.
- 34. Knockmeal 3 4.42ha. Established in 2021.
- 35. Ballygarrett 12.11ha. Established in 2021.
- 36. Tooreen Duagh 2 7.40ha. Established circa 1993/1995.
- 37. Cahercullenagh Lower 2 2.94ha. Established circa 1990.

#### New property to be added to the MU:

- 38. Gortagurrane East 14.93ha. Established circa 1998.
- 39. Knocknagashel West 2 6.23ha. Established in 2025.

All forested land is owned by freehold title by the Irish Forestry Unit Trust (IForUT). Legal folios are held on file.

#### **Elevation**

- Pilgrim Hill 110 metres to 90 metres.
- Cahercullenagh Lower 1 150 metres to 110 metres.
- Carrigcannon 130 metres to 90 metres.
- Glashanacree 150 metres to 100 metres.
- Rylane 170 metres to 140 metres.
- Tooreen Duagh 180 metres to 140 metres.
- Lyracrumpane 195 metres to 140 metres.
- Tooreen Kilflynn 310 metres to 120 metres.
- Tooreen Kilflynn 2 310 metres to 120 metres.
- Tooreen Kilflynn 3 310 metres to 120 metres.
- Derryvrin 10 metres to 5 metres.
- Dromada Mor 180 metres to 140 metres.
- Knockmeal 170 metres to 140 metres.
- Gortclohy 295 metres to 110 metres.
- Knockalougha 200 metres to 145 metres.
- Cappagh 180 metres to 115 metres.

- Knockmeal 2 170 metres to 140 metres.
- Knockalougha 2 200 metres to 145 metres.
- Glashananoon 210 metres to 150 metres.
- Glantaunyalkeen 225 metres to 160 metres.
- Knockalougha 3 220 metres to 140 metres.
- Tooreen 160 metres to 125 metres.
- Banemore 210 metres to 190 metres.
- Cloghanenagleragh 175 metres to 130 metres.
- Feavautia 175 metres to 165 metres.
- Gortclohy 2 295 metres to 110 metres.
- Knocknagashel West 160 metres to 110 metres.
- Knocknaglogh 280 metres to 240 metres.
- Leath East 290 metres to 165 metres.
- Tooreen 2 150 metres to 130 metres.
- Bunnaruddee 35 metres to 25 metres.
- Meenbannivane 110 metres to 95 metres.
- Knocknagashel West 3 150 metres to 110 metres.
- Knockmeal 3 170 metres to 160 metres.
- Ballygarrett 95 metres to 35 metres.
- Tooreen Duagh 2 180 metres to 160 metres.
- Cahercullenagh Lower 2 150 metres to 95 metres.
- Gortagurrane East 20 metres to 10 metres
- Knocknagashel West 2 145 metres to 110 metres

#### **Statutory Land Designations**

There are twenty-nine forest sites situated in or adjoining three NPWS designated areas with protected status.

# Stacks's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161)

 Banemore, Cappagh, Carrigcannon, Cloghanenagleragh, Dromada Mor, Feavautia, Glantaunyalkeen, Glashanacree, Glashananoon, Gortclohy, Gortclohy 2, Knockalougha, Knockalougha 3, Knocknagashel West, Knocknagashel West 3, Knocknaglogh, Leath East, Lyracrumpane, Meenbannivane, Tooreen, Tooreen 2, Tooreen Duagh, Tooreen Kilflynn, Tooreen Kilflynn 2, and Tooreen Kilflynn 3 are situated in or adjoin the SPA. A European designated protection area for Hen Harriers. This is especially important for site operations where potential disturbance during the breeding season is a factor, and location in relation to the nesting site (red zone) is advised by the NPWS. All significant operations are not permitted during the breeding season from 1st April to 15th August. All licenced/grant operations are subject to statutory consultation with the NPWS, and any other significant operations will involve consultation with the local wildlife ranger. IForUT's current forest area along with surrounding grazing land, open bog, and moorland, provides optimum habitat conditions for this protected bird.

#### Lower River Shannon SAC (002165)

Ballygarrett, Carrigcannon, Cloghanenagleragh, Dromada Mor, Glashanacree,
 Meenbannivane and Knocknagashel West 2 are situated in or adjoin the SAC.

#### Bunnaruddee Bog NHA (001352)

• Bunnaruddee adjoins this NHA along the southern boundary.

#### Water/Fisheries Sensitivities:

The Stack Mountains MU is within the Feale River Catchment in the Shannon River Basin District. The Feale is an important salmon and sea trout river downstream; it is designated as a SAC in the lower sections and is a valuable resource for local anglers. The forest sites within the Stacks Mountains MU are in the following catchments and sub-catchments:

- Tralee Bay-Feale Catchment
  - o Brick SC 010 sub catchment
  - o Brick SC 020 sub catchment
  - o Feale SC 030 sub catchment
  - Feale SC 040 sub catchment
  - Galey SC 020 sub catchment
  - Lee [Tralee]\_SC\_010 sub catchment
  - Maine SC 030 sub catchment
- Laune-Maine-Dingle Bay Catchment
  - Maine\_SC\_030 sub catchment

#### Margaritifera (Fresh Water Pearl Mussel)

 Ballygarrett, Banemore, Carrigcannon, Cloghanenagleragh, Dromada Mor, Feavautia, Glantaunyalkeen, Glashanacree, Glashananoon, Knockalougha, Knockalougha 2, Knockalougha 3, Knockmeal, Knockmeal 2, Knockmeal 3, Knocknagashel West, Knocknagashel West 2, Knocknagashel West 3, Knocknaglogh, Lyracrumpane, Meenbannivane, Pilgrim Hill, Rylane, Tooreen, Tooreen Duagh, Tooreen Duagh 2 are situated in the Feale FWPM zone.

Feale FWPM is a catchment of extant populations of Fresh Water Pearl. IForUT will adhere to the Forest and Water Quality Guidelines - all ground operations are to take all precautions and mitigation to avoid ground damage, siltation, or any pollution entering watercourses.

#### Old Woodland Sites (OWS):

There are no OWS/potential OWS situated in the Stacks Mountains MU.

#### Archaeology/Historical/Cultural:

There are two recorded and protected structures/monuments in the Stack Mountains MU. Features are recorded on the 'Sites and Monuments Record' (<a href="https://maps.archaeology.ie/HistoricEnvironment/">https://maps.archaeology.ie/HistoricEnvironment/</a>).

There is a hut site/ringfort, and a general enclosure in the Cahercullenagh Lower property, and this is marked on all operational maps and will be protected as such. and this is marked on all operational maps and will be protected.

Regarding cultural heritage there is an old Mass Path in the Carrigcannon property near the village of Lyracrumpane – this is marked as a feature on all operation maps and operators are instructed not to hinder use of this route as much as is safe and practicable. Local representatives have been consulted to discuss any impact of forestry operations.

The Forest Service advises on protection and outlines mitigation measures when IForUT applies for a license to conduct 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.

There are three soil types across the Stacks Mountains MU Forest sites.

 The main soil types in the Stack Mountains MU are surface water gley and peat on the lower-lying properties with a limited cut over blanket peat on the slightly higherlying areas. Alluvial gleys are found where sites are situated or adjoin watercourses.

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

#### Low Felling Impact with High Afforestation Sensitivity

Most forest blocks are classed as low felling impact on the IForUT system due partly to the extensively forested landscape and small size of the IForUT holdings. Whenever felling licences are submitted, the Forest Service will correspond with relevant local and statutory bodies to investigate any potential landscape sensitivities. The moderate classification covers the following upland properties, Tooreen Kilflynn, Cappagh, Tooreen 2, Leath East, and Gortclohy which will require some sensitivity given to the restocking planning in this MU.

To address the potential landscape impact issues caused by future clearfelling, the felling plan has applied a significant coupe restructuring plan to reduce clearfell size and introduce coupe separation. Long-term restructuring plan outlines future restructuring species, which are limited to Sitka spruce and Norway spruce based on soil types and management objectives. Biodiversity enhancement is focused on the creation of additional open ground and the expansion of broadleaved woodland. Species choice is specifically matched to soil type and exposure.

#### 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. Stacks Mountains MU

	Objective	Was it achieved?	How was this information applied to 5-year Management Plan
			review?
1	Economic	Some properties within the MU have been thinned. As is	Thinning volumes removed have been below production forecasting
	Return	typical in this part of the country - productivity is mixed	to maintain crop stability. No further thinning has been carried out in
		within the MU and productivity, and quality varies	the older properties in the MU as the risk of windblow is then higher
		dramatically within the properties.	and harvesting of windblown timber will diminish economic return.
			Significant windblow following storm Darwin in 2014 had diminished
			economic return regarding Timber Revenue in those sites that were
			affected. Sites that were blown were typically the most productive
			areas. That storm event significantly disrupted the timber production
			and economic return that should have been occurring over the
			subsequent years. In the period 2023 to 2025 Derryvrin,
			Glashanacree, Gortclohy, Pilgrimhill, Rylane, Tooreen Duagh and
			Tooreen Kilflynn were clearfelled. The planned 2023 clearfells in
			Carrigcannon and Leath East were pushed back to the late 2020's.
			Two of the newer sites have been possible to thin which will improve
			the economic prospects in the future.
2	Certification	Certification standards and IForUT systems applied over	Continue as before and update FMM as required.
	Standards	the plan period. Managers working off FMM	

## 3 Timber production

Timber production had been maximised through thinning where possible. Sharp falloff in timber production due to no thin policy for the current rotation which were damaged by 2014 Storm and poorer crops being left following harvesting of storm damage. Since the last plan review in 2022, there have been clearfells in seven sites across the MU.

Strong DBH growth in thinned crops and significant volume increment. However, the 2014 storm blew over the best crops within this MU. This led to timber production plans being front-loaded in 2015 and 2016. Due to the extent of damage in the Management unit, it was deemed that there would be no further thinning in current rotation crops in this Management Unit. There was only a small clearfell in Rylane in the subsequent years and only one property which is a new acquisition has been thinned. Productivity is very mixed in the MU with yield class for spruce ranging between 8 and 24. As mentioned above, there was a lull in timber production in the years since the major storm event.

In the period 2023 to 2025 Derryvrin, Glashanacree, Gortclohy, Pilgrimhill, Rylane, Tooreen Duagh and Tooreen Kilflynn were clearfelled. The planned 2023 clearfells in Carrigcannon and Leath East were pushed back to the late 2020's.

Coupes have been spread out as much as possible to facilitate restructuring and to have a more steady and consistent flow of timber. Felling coupes have also been separated out as much as possible to allow for time delays between felling coupes and to try to ensure that there is not a glut of felling in any five year period. However, delaying felling or bringing felling forward any further would result in severe economic losses from either a too small tree size or wind-damage because of delaying felling beyond a critical top height.

4	Landscape	Two new landscape layers added to designations GIS	New landscape layer added to Sensitivities Map in MP. All properties
		layer. Forest Service layer taken off National Development	classified as having Low sensitivity according to LU classification
		plan for new planting and Landscape Unit appraisals	apart from Gortclohy, Cappagh, Tooreen 2, Leath East, and Tooreen
		based on Coillte LUs.	Kilflynn which were classified as moderate. All were classified as low
			in FS classification, due partly to the extensively forested landscape
			and small size of the IForUT holdings.

## 5 Biodiversity Enhancement

Biodiversity areas have been identified and classified across the FMU on IForUT's GIS system. Good site knowledge gained from forest operations and improved management planning with aerial imagery and drone surveys.

Due to the clearfell and reforestation operations, and afforestation operations in the past five years, there have been opportunities across several properties in the MU to restructure crop boundaries adjacent to watercourses, roads, neighbouring dwellings and archaeological features and create new forests to current Irish forestry standards.

Opportunities for biodiversity enhancement will continue at the reforestation phase following the periodic felling of first rotation crops. Native broadleaves will be planted, and specific areas will be left unplanted to create a mixture of native woodland and open habitat.

IForUT have given access to Lyracrumpane community development group to carry out some work along the riverbed of the Smearlagh river. This has stabilised the riverbank and prevented erosion. Mulching behind houses and removal of some trees in Pilgrim Hill has improved some open space habitat. There are significant areas of broadleaves in some of the newly afforested properties such as Meenbannivane and Ballygarrett with a full conversion in Knocknagashel West 2 from conifer plantation to a native wood comprising oak, birch, Scots pine etc. Bunnaruddee also has large area of broadleaves adjacent to the neighbouring dwelling. There is also a section of bog which has been retained as a bog habitat. There is also an area of cutaway bog in Leath East which provides some habitat diversity.

In accordance with the standard for Felling and Reforestation (2019), there will be uninterrupted water/aquatic zone, habitat, archaeological, public road, and utilised building (i.e. dwelling houses) setbacks created where required, and native broadleaves and Scots pine planted where practicable.

			The enhancement and/or creation of biodiversity features will
			continue with all replanting operations as illustrated in the Long-Term
			Restructuring Plan for the Stacks Mountains FMU.
			Species recorded in the MU include Hen Harrier, Buzzard, Hare,
			Badger and Otter.
			Areas of ash in the FMU have been affected by Ash Dieback. In
			general it is planned to remove these areas over time though some
			areas may be suitable for retention. The current plan is to restock
			with native broadleaves and in some cases in this FMU where Ash
			plots are adjacent to roads – there areas will be left as open space.
6	Stakeholder	General quiet locality. In the past there was little	During the plan review, a comprehensive stakeholder consultation
		interaction from neighbours but that has changed with	has been conducted. Some ongoing cooperation between IForUT
		more interaction with neighbours and community groups.	and Lyracrumpane Community Development about work on the
			mass path walk going through Carrigcannon.
			Some interaction from neighbours in Pilgrim Hill following a fire in a
			private plantation several kilometres away. IForUT mulched the area
			behind the neighbouring houses. The planted area adjacent to the
			mulched area behind the houses has since been felled with 60m
			unplanted setbacks installed during the reforestation operation.
7	Professional	managed. Forest Managers are members of	Retendering of whole portfolio into regional management units in
	Development	SIF and attend lectures and field days as part of	2010 to simplify overall forest level management and FSC
		continuous professional development.	compliance. New centralised network server
			been introduced for managing FMM and IForUT database.

8	Forward	Continue with current standards and work practices and	Carry out reviews of Forest Management Manual and introduce
	Planning	review on a continuous basis to implement industry best	manager training and updating of best practice.
		practice.	