

Craigvinean Land Management Plan

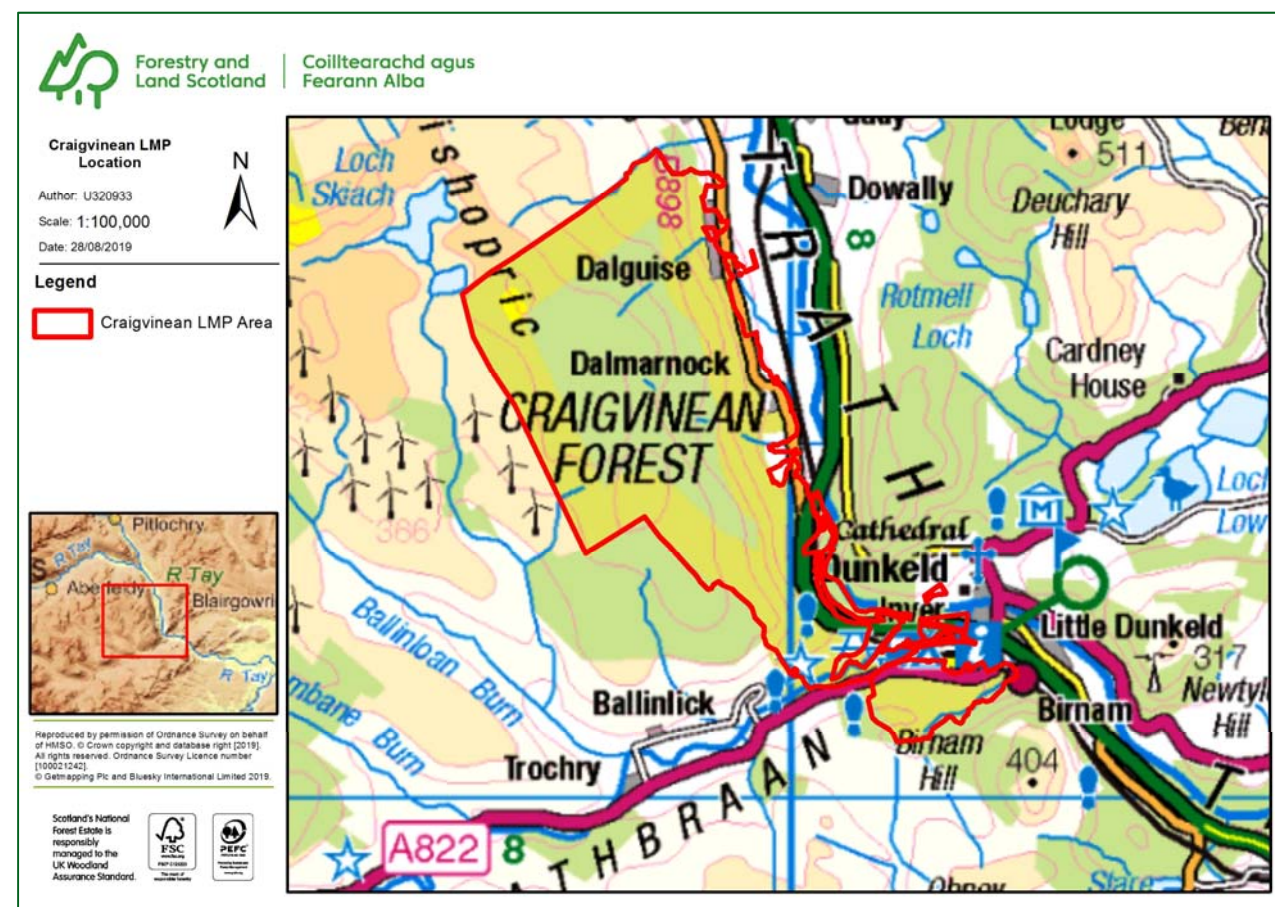
1. Introduction and summary

1.1 Location

Craigvinean forest is located on the western slopes of the Tay valley overlooking the town of Dunkeld in Perthshire. The forest sits on the Highland boundary fault rising northwards up the Tay valley from Dunkeld. The peak of Craig Vinean and the neighbouring Craig a Barns form what is often termed 'the gateway to the highlands', marking the transition from the largely flat agricultural landscape of the Scottish lowlands to the wild, mountainous environment of the Highlands.

1.2 The site

The land holding covered by this management plan includes the main Craigvinean block, rising up from the river Tay on the east facing slopes of Craig Vinean. A second smaller block; Ladywell, separated from the main forest by the A822 and a number of dispersed fragments separated by the A9 are also included in the scope of this plan. The forest covers a total area of 1937 ha and contains a diverse range of habitats from the cathedral-like stands of Douglas fir surrounding the Hermitage to the sub-alpine moorland atop Creag an Uamhaidh.



1.3 Certification

The management of the woodland is certified and at all times we seek to adhere to the UK Woodland Assurance Standard (UKWAS).

1.4 Key Issues

The key issues in this plan are:

- The forest is a dominant feature of the landscape, being highly conspicuous from the town of Dunkeld and along its full length when driving on the A9 or from the railway.
- The forest is home to a number of European protected species (EPS). Craigvinean is accepted as one of the most important sites in the UK for forest raptors.
- Browsing pressure from red, roe and fallow deer is currently high in the forest. Areas of windblow at higher elevations and natural regen in CCF areas provide perfect cover for deer and hamper efforts by rangers to protect habitats and future crops.
- There is currently no road access to the upland coupes behind Creag an Uamhaidh.

- Larch is a significant component of the forest, typically used in highly conspicuous areas to provide seasonal colour variation. These areas are currently at risk of infection by *Phytophthora Ramorum* (see figure 1).
- As a national trial site for continuous cover forestry (CCF) management the block contains a high proportion of CCF coupes, some of which have missed key interventions or are sited in areas unsuitable for repeated operations.



Fig. 1 – Seasonal colour provided by larch in Craigvinean

- There are a number of coupes located on steep, craggy slopes.
- The A9, which passes alongside the main forest block, is currently in the planning phase of upgrading to a dual carriageway. Planned works will undoubtedly have an impact on the management of the block.
- The forest contains significant areas of PAWS and ancient woodland designations.
- The forest receives high visitor numbers each year. Approximately 200,000 people visit the National Trust (NTS) site at the Hermitage with a significant proportion of these visitors also taking in wider walks through the forest block. The area is also considered nationally significant for mountain biking.

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1.5 Proposals in Brief

- Fell 432ha of forest.
- Thin 1,293ha of conifer woodland, predominantly for the purpose of continuous cover forestry management.
- Restock 531ha of woodland with a variety of commercial crops and native species based on local site conditions and management objectives.
- Upgrade 4,200m of forest road to improve management access for operations and construct 2,500m of new road to access isolated coupes.
- Begin restoration process on 14ha of deep peat for carbon capture and storage.
- Begin restoration of PAWS areas through thinning and under-planting of native broadleaf species.

1.6 Timing

This plan presents in detail the management, felling, thinning and restocking proposals for the next 10 years (2020-2029). This 10 year period is particularly important because it relates to the part of the land management plan that requires specific approval from Scottish Forestry. Longer term management of Craigvinean is included in the plan but mainly to provide an indication of the direction of travel and to provide context.

1.7 Consultation and Further Information

During the development of this plan we have consulted with the local community and statutory and other interested stakeholders. Records of consultee responses and public drop-in sessions can be found in appendix I.

For further information on the plan please contact:

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2. Forestry Scotland Regulatory Requirements

This section provides a summary of the elements of the Land Management Plan which are regulated by Scottish Forestry. In line with approvals sought, this focusses on relevant operations and activities proposed for the first 10 years of this plan.

2.1 Summary of Planned Operations

Proposed Operations	2020 - 2029
Felling Area	431.98
Gross Thinning Area	1293.1
Restocking Area	531.11
New Road Construction	2,500m
Road Upgrade	4,200m

2.1.1 Proposed Felling in Years 2020-2024

Proposed Phase	Area to be Felled (ha)	Proportion of Woodland Area (%)
2020 - 2024	177.25	9.1
2025 - 2029	254.73	13.1

Details of Clearfell by Coupe for phase 1

Coupe Reference	Programme Year	Species 1	Area (ha)	Species 2	Area (ha)	Other Species	Area (ha)	Open Area (ha)	Total Area (ha)
22003	21/22	HL, JL	2.39	SS	0.38	SP	0.22	0.38	3.37
22004	20/21	SS	19.67	LP	15.52	JL, MOP	7.51	10.28	52.98
22024	23/24	JL	3.40	SS	0.31	-	0.00	0.00	3.71
22030	20/21	SP	6.37	SS	3.99	LP	1.30	0.00	11.66
22034	20/21	SS	4.87	SP	1.56	-	0.00	1.27	7.70
22053	21/22	JL	12.58	LP	2.77	SS, SP	3.41	1.83	20.59
22055	20/21	EL, HL, JL	13.48	SS	6.71	CAR, BI	0.75	1.77	22.71
22091	24/25	SS	3.72	DF	2.16	NS, EL, SP	2.68	0.24	8.80
22097	23/24	SS	8.97	DF	5.75	NS	0.35	0.10	15.07
22110	21/22	EL, HL	3.24	SS	2.81	NS, SP	2.86	0.44	9.35
22111	21/22	NS	4.24	DF	3.98	SS, BI	3.69	0.85	12.76
22124	23/24	SS	3.84	SP	0.52	NS, DF	0.69	0.00	5.05
22127	24/25	DF	1.68	BI	0.09	-	0.00	0.10	1.87
22131	24/25	JL	1.43	SS	0.20	-	0.00	0.00	1.63

Changes in Age Class over plan period

Age of Trees	Growth Stage	Percentage of Class at Given Year			
		2020	2024	2029	2039
0-10	Establishment	9.4	21.2	27.5	21.0
11 - 20	Thicket	8.5	4.3	7.7	25.4
21 - 40	Pole	12.2	12.8	14.4	14.5
41 - 60	Maturing High Forest	21.4	18.9	10.2	6.6
61+	Old High Forest	31.6	27.6	23.8	15.9
Integral Open Ground	N/A	9.5	8.5	10.7	12.8
Open Hill Ground	N/A	7.4	6.6	5.6	3.8

2.1.2 Proposed Thinning in Years 2020-2024

Proposed Phase	Area to be Thinned (ha)	Proportion of Woodland Area (%)
2020 - 2024	435.06	22.4%
2025 - 2029	516.47	26.6%

N.B. Please note difference between gross thinning area shown in summary table 2.1 and net thinning area shown above. Net thinning area is the area that will actually be thinned, discounting open space, natural reserves and crops that will not receive an intervention in the plan period.

Details of Thinning by Coupe for phase 1

Coupe Reference	Programme Year	Species 1	Area (ha)	Species 2	Area (ha)	Species 3	Area (ha)	Open Area (ha)	Total Area (ha)
22906	2020/21	SS	30.75	SP	13.13	HL	3.84	1.86	49.58
22905	2021/22	SS	40.66	SP	21.22	MC	37.87	22.22	121.97
22008	2021/22	BE	4.77	DF	3.57	NS	0.50	0.24	9.08
22902	2022/23	DF	26.27	EL/HL/JL	11.07	MC	26.07	11.15	74.56
22901	2023/24	SS	16.58	NS	11.31	MC	22.93	1.79	52.61
22903	2024/25	NS	40.86	DF	34.89	MC	47.40	4.11	127.26

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2.1.3 Proposed Restocking in Years 2020-2024

Proposed Phase	Area to be Restocked (ha)	Proportion of Woodland Area (%)
2020 - 2024	264.08	13.6
2025 - 2029	267.03	13.8

Proposed Restocking by Coupe for phase 1

Coupe Reference	Programme Year	Species 1	Area (ha)	Species 2	Area (ha)	Other Species	Area (ha)	Open Area (ha)	Total Area (ha)
22001	2020/21	SS	12.95	LP	7.71	MB, SP, JU	6.74	10.41	37.79
22002	2020/21	SS	9.49	MB	8.44	LP, JU	2.15	12.95	33.03
22003	2022/23	SP	2.24	SBI	0.97	MB	0.10	0.06	3.37
22004	2021/22	SS	24.96	LP	6.81	SP, SF, NF, JU, MB	17.17	4.04	52.98
22008	2022/23	SOK	5.78	BE	4.33	MB	2.89	1.44	14.44
22024	2024/25	NS	2.60	MC	0.74	MB	0.37	0.00	3.71
22030	2021/22	SS	7.17	DF	2.37	MB, PBI, SP, CAR, SF	1.67	0.45	11.66
22034	2021/22	SS	2.38	SP	1.35	DF, NS, ESF, CAR, PBI	3.53	0.44	7.70
22053	2022/23	SS	9.70	SP	3.31	NS, LP, NF, PBI	5.52	2.06	20.59
22055	2021/22	SS	14.54	ASP	1.97	BI, ROK	2.62	3.58	22.71
22071	2020/21	OK	5.79	MB	5.79	-	-	17.36	28.94
22110	2022/23	SS	3.33	DF	1.97	MB, BI, WRC, CAR	3.19	0.86	9.35
22111	2022/23	NS	6.06	GF	1.73	MB, SS, WRC, CAR	4.13	0.84	12.76
22124	2024/25	DF	2.05	PBI	1.90	GAR, POK, MB	0.97	0.13	5.05

Species Change Over Plan Period

Species	2020		2024		2029		2039	
	Area (ha)	%	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka spruce	602.9	31.1	624.5	32.2	585.4	30.2	559.9	28.9
Norway spruce	244.0	12.6	245.6	12.7	246.8	12.7	224.9	11.6
Douglas fir	120.1	6.2	107.6	5.5	106.0	5.5	115.1	5.9
Scot's pine	163.8	8.4	168.6	8.7	162.3	8.4	161.7	8.3
Lodgepole pine	150.5	7.8	149.4	7.7	104.1	5.4	50.8	2.6
Larch	157.0	8.1	114.9	5.9	86.2	4.4	52.5	2.7
Other Conifers	22.6	1.2	30.6	1.6	40.6	2.1	60.0	3.1
Birch	45.0	2.3	50.6	2.6	78.1	4.0	97.0	5.0
Oak	47.9	2.5	62.7	3.2	74.6	3.8	93.8	4.8
Mixed Broadleaves	58.2	3.0	91.6	4.7	138.7	7.2	201.3	10.4
Open/felled	327.0	16.9	300.8	15.1	316.0	16.3	321.7	16.6
Total	1939	100	1939	100	1939	100	1939	100

2.1.4 Access and Roding in Years 2020-2024

Period of Works	Proposed Length for Construction (m)	Proposed Length for Upgrade (m)
2020 – 2024	0	4,200
2025 – 2029	2,500	0
Beyond 2030	1,700	0

2.2 Departure from UKFS Guidelines

The Land Management Plan seeks to follow the UKFS in all requirements. No felling will take place until any neighbouring restock areas have achieved two metres in height. If this is not achieved the separation will be agreed with Scottish Forestry.

2.3 Tolerance Tables

Refer to Appendix III.

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3. Determination

3.1 Deforestation

During the plan period it is intended to begin the process of restoring approximately 14ha of currently forested area back to peatland habitat. In addition to this the proposed new road segments detailed in section 3.2 will lead to approximately 7ha of further loss in forest cover.

3.2 Forest Roding

During the plan period it is expected that two new sections of road will be required, each one approximately one kilometre in length, to access felling coupes 22045 and 22046. These coupes are scheduled for felling in 2025 and 2027, EIA determination and planning consent will be sought at the point of mid-term review. It is intended for these spur roads to be connected into a loop with a further 1.2km of road to access felling coupe 22047 in 2034.

Approximately 4.2km of road upgrades are also required during the plan period to gain entry into felling and thinning coupes where the current road network is in need of repair.

3.3 Quarries

A new quarry will need to be identified during the plan period to service the requirements for road construction and maintenance. At present it is not known if this will be identified within the block or at a remote location. If it is within the block due process will be followed including EIA determination if required.

3.4 Afforestation

During the plan period it is intended to expand forest cover across the top of Creag an Uamhaidh; an area of 31 ha currently described as open hill top. Sitka spruce are beginning to self-seed on the open ground, these trees will be cleared and a low density matrix of juniper and hardy broadleaf species will be planted. Oak will be added into the mixture at lower, more sheltered elevations.

3.5 Additional Regulatory Requirements

3.5.1 Water Framework

The locations of Perth and Dunkeld are noted in SEPA's Flood Risk Management (FRM) as areas prone to flooding – both locations are downstream of the forest plan area. Most impacts from flooding appear to be from the Tay and it is noted generally that due to the size of the catchment (and the relatively low proportion of forestry in the catchment) any felling is unlikely to have a significant negative effect on flooding. The same is true of the River Braan which flows into Dunkeld. However the proportion of forest cover in the Inchewan catchment (above Dunkeld) is higher and as such FLS will aim specifically in this catchment to phase felling or adopt continuous cover forestry practices, where appropriate, so that peak flow is not exacerbated because of short term canopy removal due to clearfelling systems.

Also it is noted that there are no specific National Flood Management (NFM) actions noted as part of the Local FRM Plan, but FLS does always follow the UKFS including extending riparian zones, disconnecting drains from watercourses and generally slowing the flow of water – these standard actions will act as natural flood management along with delivering other environmental benefits.

3.5.2 Prior Notification

Maintenance of roads will be carried out in line with Timber Transport Forum document "The design and use of the structural pavement of unsealed roads (2014)". Prior notification will be sought for the area of new road that is greater than 25m from the public road. As all remaining proposed roading works in the scope of this plan are classed as maintenance of existing infrastructure no prior notification should be required. If the need arises, prior notification will be sought at the time of work planning.

3.5.3 Planning Consent

As all planned new roads are more than 25m from a public road and in an area of low visual impact no planning consent should be required.

We manage Scotland's National Forest Estate to the United Kingdom Woodland Assurance Standard – the standard endorsed in the UK by the International Forest Stewardship Council® and the Programme for the Endorsement of Forest Certification. We are independently audited.

Our land management plans bring together key information, enable us to evaluate options and plan responsibly for the future. We welcome comments on these plans at any time.



The mark of
responsible forestry

