



Certificate of Approval for Tree Felling

This is to certify that tree felling under

Forest Design Plan ref. STF 59
TORNAT

*has been approved by the Forestry Commission as
being in accordance with Government policy for
the sound management of a renewable resource.*

*This certificate is valid only for the
period of the felling approval.*

Signed

Forestry Commission Officer

Date 8/12/14

CSM 6 Appendix 6

FOREST ENTERPRISE - Application for Selective felling or Clearfelling not covered by a Forest Design Plan

1. Forest Enterprise – Property Details

Forest District:	Dumfries and Borders
Woodland or property name:	Tornat
Nearest town, village or locality:	Palnokie
OS Grid reference:	NX82925564
Local Authority district/unitary Authority:	Stewartry

2. Trees to be felled

Felling site / cpt	Gross Area (Ha)	Activity	Felling Year	Spp	Marking	Area (Ha)	Age	Total no. of trees	Comments
Area C	8.0	Restoration	2015	JL	paint	6.0	P84	3575	1339m ³
Area C	2.3	Restoration	2015	SS	paint	1.0	P84	988	312m ³
Area B	1.7	Restoration	2015	JL	paint	1.7	P1930	732	613m ³
Area B	3.3	Thinning	2015	SYCBe		1.0	P1930		30% fell 70% retain
Area D	4.0	Thinning	2015	Be		0.84	1930		12 groups
Area A	0.2	Clearfell	2015	JL	paint	0.2	P76	89	43m ³
Area A	1.8	Clearfell	2015	SS	paint	1.8	P76	1624	1280m ³

3. Proposed restocking

Cpt	Gross Area (Ha)	Activity	P Year	Spp	Area (Ha)	Open Ground (Ha)	Comments
NBL over time Area D	4.0	Over time restore to NBL	2016	Oak Birch Row Haz	0.84	0	Majority of mature Beech retained. 12 groups of 30m dia felled.
75%NBL 25% Open Areas B&C	15.3	Nat regen of NBL	2016	NBL	11.5	3.8	Enrichment planting of oak may be required.
Productive NBL Area A	2.0	Planting of NBL	2016	Oak Birch Row Haz	2.0	0	High quality productive broadleaves with deer fence protection in main area.

I apply for authority to fell and restock¹ as above and as shown on the attached map.

I undertake to obtain any permissions necessary for the implementation of the approved application.

¹ Felling permission is granted up to 5 years from approval, restocking must be undertaken within 2 years of felling.

Signed PP Alan Gahn Signed [Signature]
Forest District Manager **PLANNING FORESTER** Conservator
District Dumfries + Borders Conservancy SOUTH SCOTLAND
Date 7/10/14 Approval Date 8/12/14



Tornat Draft Management Plan Version 2

Contents

1. Draft Management Plan
2. Felling and Thinning Map
3. Restocking and Future Habitat Map



Introduction & background

Tornat woodland is 22.3ha in size and is situated next to the Urr estuary a few miles from Dalbeattie and Castle Douglas. There are ancient woodland records for the wood dating back to 1750 and 1850 and more recently was planted with spruces and beech in the 1930's. In the 1970's and 80's the first rotation spruces were largely removed and re-established with spruces and larches. Tornat does not have an approved Forest Design Plan but it is the intention to create a full plan in due course.

Nature Conservation

The site is classified as ancient woodland in the SNH Ancient Woodland Inventory, some of which is category 1a (Ancient and semi-natural) and others category 2b (Long established of plantation origin). FCS have been monitoring the woodland and have considered it as a PAWS restoration site. (Plantation on Ancient Woodland Site). This means that the woodland will be restored to native woodland species in the long term. There are many biodiversity benefits in restoring ancient woodland sites.

Public Access

The woodland has a core path and is used by a number of locals and visitors. The path is well trodden and used frequently.

Timber Production

There is potential for productive broadleaves in the future forest which will deliver biodiversity and environmental benefits as well as the diverse timber products including hardwood. In the short term tree felling will be required as part of the restoration process and timber will be sold and processed off site.

Landscape

Tornat sits within the East Stewartry Coast National Scenic Area which is designated for outstanding scenery. It sits within the Coastal Granite Uplands of the D&G Landscape Character Assessment with specific landform described as Hills-Rugged Slope-Steep Hummocks Outcrops-Rocky. When in the woodland and viewing from the forest road / paths there is already a good amount of species diversity. The structural diversity is lacking open space and younger trees and a thinning and group removal would help with this. From a distance and from looking across from Kippford the woodland would be more natural if changed to native species and would also accommodate open space to expose the rugged landform around the viewpoints on top of Tornat.

Community

There is an active community with an interest in the woodland. Buittle and Colvend and Southwick Community Councils will be consulted prior to any tree felling works. A drop in session was held at Palnakie Village Hall on the 6th of October to help explore and discuss the issues at Tornat. Although not too well attended in terms of



numbers there was much information exchanged including discussions on timber transport, future species, access, landscape.

Operational Access

There is an adequate forest road throughout the wood. The public road to Palnakie is not classified in the Agreed Timber Transport maps but there are no obvious restrictions. The Roads department will be consulted as part of the felling application. On site the majority of the timber extraction could be done by forwarder and some of the steeper sites will require skidder.

Silvicultural Issues

The site is very fertile and the majority is brown earth giving many options for establishing native woodland broadleaved species. The climate is very favourable benefiting from the proximity to the Solway coast and the climate from the Atlantic Drift. The wind speeds are low. The growing season is relatively long and the wetness is highly suitable for tree growth. Natural regeneration will be possible. Site has potential for productive broadleaves.

Threats to trees

Fast vegetation growth is an issue and will need to be managed. There are extensive rabbit populations that will need to be managed along with deer, both of which will be a threat to trees. A deer fence is proposed to protect the oak nests between the forest road and the estuary. The oak nests immediately to the West of the forest road will be protected by small enclosures and the matrix planting can be protected by tubes. We intend to avoid deer fencing across the forest road which is a Core path and also a route of access for agriculture.

The Concept

Over time the woodland will be restored to native woodland through removal of exotic species, supplement planting and encouragement of natural regeneration of native species. Nature conservation, hardwood timber production and access are key management objectives.

The proposal – Thinning and felling.

The majority of the exotic conifers (Spruces and Larches) will be removed in 2015 from areas B and C. Native broadleaved species and Scots Pine and Douglas Fir (274 stems counted) will be retained for diversity and landscape. Some beech and sycamore will also be retained until the next again thinning because the key principle of restoration is to convert slowly as not to lose the mosses and lichens and native woodland ground vegetation created by the enclosed conditions. Restoration of native woodland sites must have less than 10% exotic conifers and by implementing the above felling this will be achieved. The dozen or so mature Sitka



Spruce just to the North of the vehicle gate and between the road and the estuary will be retained as they are old and large feature trees. In addition up to 20 other large character SS trees will be retained across the site.

Area D, the beech will be thinned, including small groups upto 30m. As the beech stand is impressive and offers good social, environmental and timber outputs a very slow and gradual conversion of the whole sub compartment to native broadleaves (say 50 + years)

In 2015 we propose to fell Area A, the 2ha of p1976 Sitka Spruce adjacent to the estuary.

The proposal – Restocking.

Productive NBL over time. Following the thinning of the beech and the removal of up to 12 groups of 30m, oak nests will be planted in the centre of the gap and birch, rowan and hazel planted immediately around to form a nurse for the oak.

Productive native broadleaves (Oak nests). Following the clearfell of the conifers, this area will be planted with oak nests and matrix of birch, rowan and hazel. The oak nests will consist of groups of 25 oak saplings at 30-50cm spacing with 10m between these groups. The matrix will be planted at 3000 saplings per ha. Some coppicing of existing hazel may be required where the oak will demand light.

Native broadleaves – 75% NBL, 25% Open. This area of land will be established mainly by natural regeneration of NBL and some supplement planting of target species e.g. oak.

Potential environmental impact considerations

With the immediate proximity of the Urr Estuary there is a risk of water pollution through harvesting. All operations will be managed as per Forests and Water Guidelines and all controls will be in place e.g. Bunded tanks etc. In the longer term, as the woodland moves towards native woodland it will be managed under a lower impact system thereby reducing risk and indeed the native woodland will create better water quality with its buffering capacities.

Although there will be some small scale landscape disruption due to felling and thinning, this will recover quickly and the wider landscape will benefit greatly by the change to native broadleaves and greater structural diversity. The small groups should have little impact from further a field but will increase the structural diversity at the small scale landscape. In addition there is a request by the community to open up the views from the top of Tornat and this can be delivered as part of the thinning and group felling.

There are records of charcoal burning sites and these will be highlighted and protected as part of the operation. Prior to any operations in 2015 an archaeology survey will be undertaken to identify and recommend the protection of the sites. Appropriate buffers will be included in the operational plan and the locations will be marked on the site. The features will be protected. The information obtained in the archaeology survey will be recorded in the FCS core data and will also be passed to the D&G council Archaeologist.



There will be some disruption due to timber wagons using the forest road and the public road to Palnakie but this is likely to be limited to one or two per day over a period of a few months. After the thinning and felling there will be no further timber haulage for 5 years or so. During public consultation an issue was raised relating to the car parking on both sides of the public road beside Palnakie shop. This should be further explored with D&G Council and FCS.

There is potential environmental impact on the fragile native woodland remnants but as this is a restoration operation, damage to the remnants will be planned and avoided at all cost.

There is evidence of important wildlife species including Otter and Heron and disturbance will be avoided through careful planning and liaison with SNH and appropriate bodies. It is understood that heron will find alternate breeding ground in the estuary following felling – but it is obviously important to avoid felling during the breeding season.

The aim is to carry out the operation over the winter period thereby avoiding bird nesting time and disruption to public access but exact timings will be published nearer the time. Much of the site and core path will require to be closed to public access for the duration of the harvesting operation. It is possible that phased opening of the North end or the South end will be possible but certainly during the operation a circular route will not be possible due to Health and Safety risks. Core paths and roads will be tidied and repaired following the operation. D&G Council access officer will be consulted on temporary closure/diversion of the core path.

Red squirrels will continue to use the woodland as a habitat and they will benefit from the additional broadleaved species over time and in the short/ medium term they will have adequate habitat (feeding and shelter) in the Beech, existing Scots Pine and hazel/oak.

Deer enclosure fencing will be built around the new productive broadleaves between the estuary and the forest road. Public access will be maintained through use of pedestrian gates.

Summary and Conclusion

Although there will be some immediate short term impacts due to the operation, there will be significant benefit in the medium and long term to both nature conservation and public access opportunities as well as production of quality hardwood timber.

by Alan Gale
Planning Forester
Forestry Commission Scotland

7/10/14

