England visit to Miterdale and Blengdale 5th June 2014

The day comprised a packed schedule of stops to look at examples of CCF practice across a range of crop types and stages of CCF development. The visits were ably hosted by Gareth Browning, the FC’s local Area Manager, who has spent many years pioneering CCF work on upland sites in the North Lakes area.

Stop 1. Miterdale Forest

Description:
80 ha. Mixed Conifer in transition to Broadleaf CCF.

Management Objectives:
PAWS restoration, public access/enjoyment, longer term: quality hardwood production.

Management Approach:
Inventory/Stratification of the area into its main components:
Mature conifer
Native Woodland
Recent Conifer
Recent Windblow clearance
Minimum intervention

Pre-Intervention monitoring:
Confined to areas which are regenerating to record species composition & success

Early interventions:
i) Selective Felling/Clearfelling. All conifer overstorey removed (SS/WH) in one operation in 2002
ii) Deer management: Monitoring enclosures constructed to monitor deer impact. Deer clearly identified as an obstacle to regeneration. Wildlife ranger recruited to address excess deer numbers

Tending:
No further intervention proposed until there is a marketable product
Decision now needs to be made about which markets to produce for, firewood? Coppice? This will dictate how and when to intervene.

Monitoring:
Stand recruitment mostly BI, HL, with some SOK.
Group Discussion:
Q: Are dormice present, and are they being managed for?
A: No evidence of dormice in the area, so not a consideration at present
A(ii) Dormice require the stand to provide both food and shelter, so 12 year old thicket stage MBL considered the optimum habitat.

Q: The mature oaks are showing a lot of epicormic growth in response to sudden opening up – should the conifer perhaps have been removed more slowly?
A: This was considered, but concerns over the likely regeneration of the WH in particular was felt to be a more pressing issue.

A2 Research shows that birch should be reduced to 1100 stems ha around yr 12 (i.e. about now), otherwise competition makes crowns too small to recover.

Open question: Stand now comprises larch, birch oak with overstorey of poor quality oak, what should be our next priority?

A1: In view of the PAWS restoration objective - there was an SOK mast year last year, suggest the young oaks should be protected at all costs to get them away as soon as possible to get back to oak birch woodland type.
A2: Do nothing and take a longer view. Accept that the birch/larch mix currently dominating the site will be a transition phase.

Stop 2 Blengdale:

Description:
Blengdale is a 430 ha upland forest with an exposed plateau managed under conventional clear fell and restock and 160ha sheltered valley managed under Continuous Cover.

CCF Stand Characteristics: DF/SS stand managed under CCF principles since 1980’s. Low DAMS score in fertile, sheltered valley. Steep slopes. DF/SS now has top ht. of 50m. Up to 12m3 av. Tree size

Objectives:
To maximise revenue from high quality timber
To grow large trees to allow visitors to experience a sense of grandeur.

Importantly, 3 new mill lines capable of handling large diameter material have recently been commissioned within the economic transport zone for the district, including George King, Lockerbie, Dumfriesshire and Peter Irving at Kirkby Lonsdale (Cumbria).
Management Approach:

i) Inventory & stratification:
Areas shown in red on plans: Early phase CCF. First and second thins carried out. No marking.
Areas shown in orange on plans: Mid phase CCF. Frame trees identified, and crown thinned. No marking except for frame trees (by contractors)
Areas shown in green on plans: Late phase CCF. Frame trees identified, and crown thinned following the patterns of the existing regeneration. Everything to be removed has been marked.

ii) Thinning:
Carried out by Skyline. Racks placed at 14m to match harvester reach. Ongoing proposal 20% of BA to be removed centred on frame trees with interventions planned every 4 years.

View north to southern Ennerdale Ridge:
Because of high windthrow risk, Phytophthora infected larch crop has been herbicide stem treated to kill trees standing. The concern is to protect the windfirm edge of the forest whilst creating opportunities for underplanting. Methodology: 2ml glyphosate being injected into each stem cut. 1 x stem cut/10cm dbh. The first treatment has been very effective with and 85% success rate. A follow up treatment is planned.
STOP 3 Blengdale

Description:
Mid Rotation SS. Origins of crop: planted, plus dense NR. Due to excessive stocking density, thinning had to be done by hand (crop too dense for harvester); the operation produced a large number of rustic poles. The manager’s view is that a better option would have been to have thinned the old crop, and managed the light levels to reduce the amount of NR, thereby negating the need to make costly early interventions.

Gareth considers that CCF thinning vs conventional thinning is very similar in terms of management time, if compared to a properly managed conventional thin. Steps to both thinning types comprise: Crop survey, writing a prescription, marking and/or feller select.

Worked Example: Compt 2118a: prescription was to remove 20% of BA. This basal area is then worked back into the number of trees to be removed. The number of trees to be removed is then split between those to be taken out around Frame Trees (crown thinning) and those to be removed for crop quality improvement. Gareth explained that the Frame Tree spacing in the stand was experimental, with 30 FT / ha being selected. Bear in mind that the number of frame trees will influence the amount of brash on the site. At 50 FT/ha the brash will provide greater coverage. Also consider the placement of FT. Avoid putting them close to racks as they are likely to be damaged by operations.

Discussion point:
Phil Morgan (Pro Silva) suggested an alternative method: Forget the Frame Trees. Thin purely for quality. Where there are pockets of poorer quality material, 3-4 adjacent trees may be removed, compensated for by lighter thinning elsewhere.

Stop 4. Blengdale

Description:
Stand of large DF with understorey in later (Green) CCF phase. Average tree size 3.7m3 (SS) 5.6m3 (DF) stand BA 30m2 +.

Management:
No frame trees. Thinnings follow the progress of NR to slowly open up the crop. Under storey regeneration well established across the site with a diverse structure from seedling, sapling through to pole stage.

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