

Private sector Production Forecast 2010 Working Group

3rd meeting at Silvan House, Central Boardroom

Roger Coppock

Justin Gilbert

Mark Lawrence

Adrian Kirby (Scottish Woodlands – for Colin Kennedy p.m.)

Andy Mason

Colin Kennedy

David Leslie

Robert Matthews

Ben Ditchburn

Chris Edwards

Gabriel Hemery

Simon Gillam

Barry Gardiner

1. Apologies

Jez Ralph, Oliver Coombe, Martin Craig

RC welcomed AK and BG to the meeting.

2. Note of previous meeting

SG said his comments were intended to indicate that it might be possible to quantify the quality of the PS data rather than saying that he would have the time to do it.

3. Actions arising

RC – Confor note revised and published in the magazine.

Webpage – on the agenda

Data provision – on the agenda

South West data – JR not here today but template circulated to the meeting – aim to achieve consistency with our work.

Yorkshire & Humber will be doing a similar project to the South West.

Revised copy of the form circulated – on agenda.

Note on providing returns of annual felling – agenda item 6

4. BSORT model development RM

ASORT – predicts volume by top-diameter assortment for volume

inputs – summary info (from Yield Model or tariff) or stand data

BSORT – biomass in tree stands by major tree component

similar inputs to ASORT, can be used for woodfuel prediction

Some verification has been carried out – fell material and weigh the biomass.

DSORT – predicts diameter distributions from Stand level details – updating needed to include new data

Status – ASORT – old fortran code is still in use

BSORT two versions – Yield Model and tariff – Delphi – research tool

DSORT – only as part of the version of BSORT

development – ASORT – new version being specified in C# (2008-09),

new versions of BSORT (2009-10) and DSORT (2008)

Vision for linked use within forecasting system and for carbon accounting but to enable this to happen it would also need a soil carbon model.

BSORT+ modifies BSORT estimates to allow for constraints on removal of biomass from site – early stages of development.

A, B and DSORT will be implemented in the 2011 forecast.

RC – asked about the current limitation of the assortment to 40cm – RM said that this was unlikely to be a constraint for 2011.

5. PF2011 programme update and website development

BD – NIWT map plus series of plots – now a real programme – plus top-up plots possible. Map progress – ML - about half to two-thirds completed and will be updated to keep a rolling programme going. 6 surveyors out at the moment including one in the SW, top-up in effect for the SW survey. Pilot will enable decisions on actual content, and will include stem straightness. BG said that crown depth was linked to stem stiffness – ML said that crown depth was included in the data being collected. PF re-write coming along, FE data being improved.

Website now on line but in need of enhancement.

CE asked about the out-turn from the SWE project – doubling the number of plots had improved the confidence limits of the conifer volume

A discussion followed on the variation/confidence limits which are required for the volume forecast.

RC – will report at regional scales – are we going to be able to do more spatially explicit regions – BD covered the effect of re-jigging the boundaries of the zones in Scotland. JG – confidence limits are related to the number of samples within any selected boundary. The number of samples is related to the woodland area and not the land area included within the zone as well as the inherent variability of the woodland sampled.

If more restricted areas are the subject of a forecast there is a real need for additional data from the PS to supplement the sample information.

DL said that extensive information existed for felling/felled volume BD said that might be hard to apply other than by owners but could be explored as a possibility.

CK – Yield Class data was absent from parts of the PS estate because owners haven't paid for it to be collected. BD observed that much of the FE YC data was 10-15 years old so some qualification might need to be attached to FE information.

RC asked what could be done with harvesting data? RM said that a rigorous protocol would be needed to allow use of the data. Areas that are harvested are not easy to relate to individual stands but relate to parcels. Some data might be of use and some will not.

SG – confidence limits only express uncertainty in the growing stock not the management intentions. DL – Utilisation can have an effect on the

forecast as decisions on what is cut or actually extracted may be taken at a late stage.

CK spoke of the effect that grants had on the PS which now include Forest Plans; recent changes had included a reduction in the restocking grant. The PS is very complex. BD recognised this and said that the new Inventory and Forecasting unit would feed its viewpoint into the proposals as regards effects on timber production. RC spoke of the need for quality data to support policy development

BG – asked about the use ESC – RM says that it comes up with a YC – RC said that it needed detailed soil survey data to be within 1 YC but this tolerance on the prediction is very significant in its effects. This coverage of soils was not extensive for FE and PS data was not available in anything like the same level of detail as FE.

CK asked about the collection of YC data in FE – BD said that there was a combination of FD and field survey staff.

In reply to question from DL, RM said that care was needed in the utilisation of harvesting data.

(RC welcomed Angela Duignan FCE to the meeting)

6. Confor board note discussion

BD – spoke to this. ML said that satellite use can detect change but needed to be cross-referenced with grant information and then check change with appropriate aerial photography. BD spoke about the problems of the availability of coverage and the cycle of renewal of this data. ML said that LIDAR could also supply information to support the update of the map and other data. AK spoke about change detection using 2m resolution data from satellite. BD said that remote sensing was key to the development of forestry data. DL spoke about the short-comings of the felling license system; could be improved with relevant grid-reference data relating to the coupe.

CK said that Confor only represented a proportion of the PS timber production.

AM said that it would be useful if the group could produce a draft of the data to be submitted to record felling; BD said that we should link with G&L staff and carry this proposal forward.

RC asked the group if they were happy with the paper and to put it to the con for board – this was agreed.

7. Timber quality forecasting (Barry Gardiner)

Stem straightness – the main determinant of log quality – assessment of first 6m of the stem in SS. Model development and further survey work carried out extending the scope of the data. Models for different parts of the country. Recent modelling makes more use of dbh and a link with straightness improving with increased diameter.

BG showed examples of work using FE forecast data combined with the TQ models to produce estimates of green/red and also showing the effect of assortment on out-turn. Other modelling also enables the

prediction of knot area ratio (KAR). Currently the straightness and conversion models are being tested on coupes along with an extension of the stem straightness survey. Work on Scots pine is also underway for publication next year. BG posed some key questions to conclude his presentation.

- What timber quality measures does the forest industry want including in the 2010 production forecast?
- What is the best way to add quality to the private sector forecast?
- Is it possible to include a forecast of log volumes by log length by linking Biometrics Division assortment models (ASORT, DSORT) with the stem straightness models? (This is what QSORT will handle.)
- What is the most appropriate level of aggregation for the model predictions (stand, coupe, district, region, country, UK)?
- What is the best way of presenting results (tabular, graphical, map based, etc.)?

What do we present – red/green split or just straightness score. DL said that new technology enables different utilisation of available timber; local processing might drive regional requirement of different measures. A tool for presentation might be ideal.

Two elements were plain; presentation for publication of the forecast was required; in addition to this specific requests with particular specifications could be answered outwith the published forecast as is done at present. BG said that stand grade might be useful as a presentational aid. ML asked about the importance of stem straightness data to confirm the appropriateness of its inclusion in National Inventory; the group assured him of its importance and BG also said that it was suitable as an assessment for all conifer species. GH said that he had a scheme for assessing broadleaves.

Action: subject for next agenda: suggestions for the presentation of the data and the importance of stem straightness.

8. Lunch

9. FC Scotland forest plan data requirements

RC – A paper was circulated summarising the proposals to improve the quality and accuracy of the forecast. Most of the fields were mandatory but other data could be added.

AK asked about the organisation of the data post-felling when restocking of a coupe could be carried out in a number of phases. BD said that advice was likely to be available to support the process especially where different databases were involved.

The spreadsheet was compliant with the GIS data transfer standard (this can be found on the e-business forum website). RC has tested the process for the transmission of felling licence data and this was

successful. SG asked if there was time to receive comments on the forms structure. It was possible that the form would fall under survey control procedures. ML asked about the actual timing of the changes (fell/restock) and how this could be recorded.

10. Data Collection format and process

SG asked about the proposed target recipients – if more than 25 businesses were approached then this fell under survey control procedures and would need Ministerial approval before it could be launched. If the management company were able to fill in the form on behalf of their clients then this was just one respondent but if they needed to contact say 30 clients then this was 30 respondents and would be subject to control. AK said that Scottish Woodlands had about 1500 clients for each of whom a form would be required and that this would be an excessive burden. It was agreed that aggregate data would have to be sought at this stage. Data was likely to be held in a wide range of formats, even in one package such as Excel and non-electronic formats. Data might exaggerate area and was not likely to have been recently updated.

DL said that it would enable us to quantify the extent of data that was in fact held in the PS, rather than relying on statements of unquantified belief. SG said that if we could concentrate on species and planting year information we would address one of the most significant sources of uncertainty in the forecasting process. RC wondered whether or not we could just ask about proportions held in different formats. AK said that all their managers held data in many different formats for many different estates. To get the data in one format would be an enormous task. RM said that it had to be clear what the benefits would be of having the data.

The data is being gathered for the benefit of the PS if we can use it to improve the forecast.

Action: BD, SG and RC to focus on this issue and circulate an enhanced format/strategy to carry this forward. Quantify benefits.

11. AOCB

GH – update on the Crewe presentation – self-participatory – quite close to an end result – would like to return to this at the next meeting. DL suggested that we needed more PS representation and RC agreed that he would explore this.

12. Location and time of next meetings

Crewe Arms Hotel, Tuesday 25th November where dates for 2009 would be discussed.

13. Close