

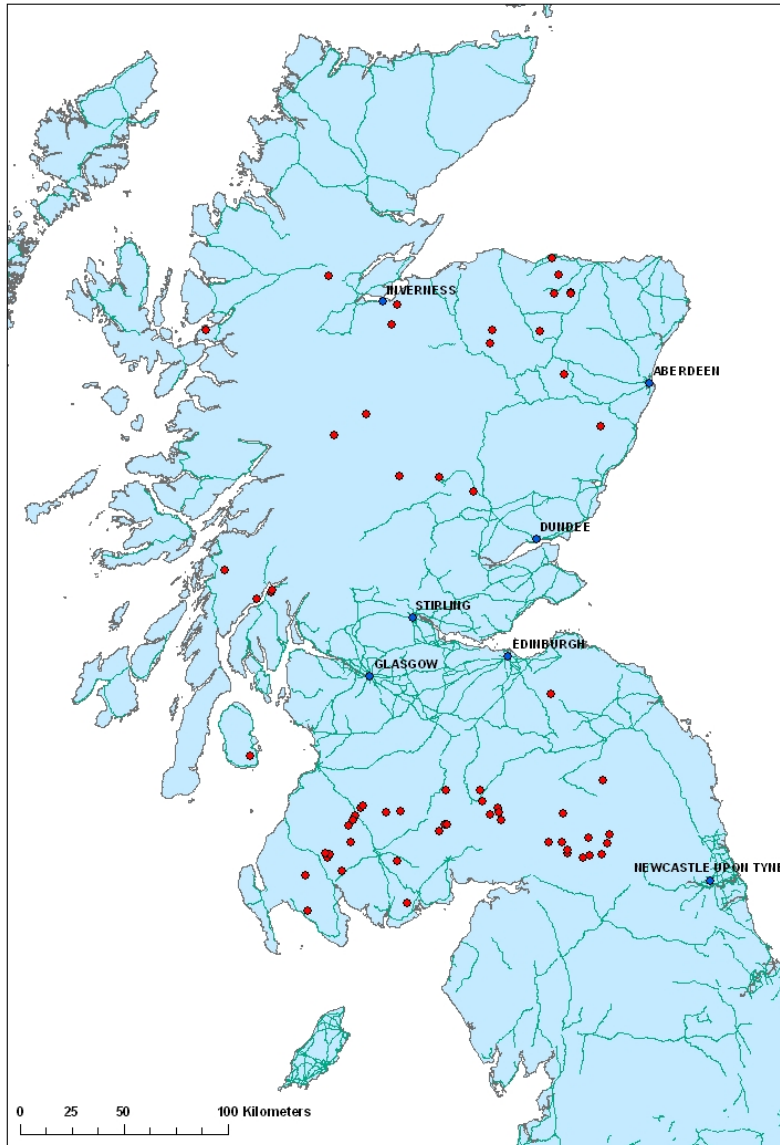
Update on the Sitka Spruce Benchmarking Study

John Moore

23 March 2010



Benchmarking Study



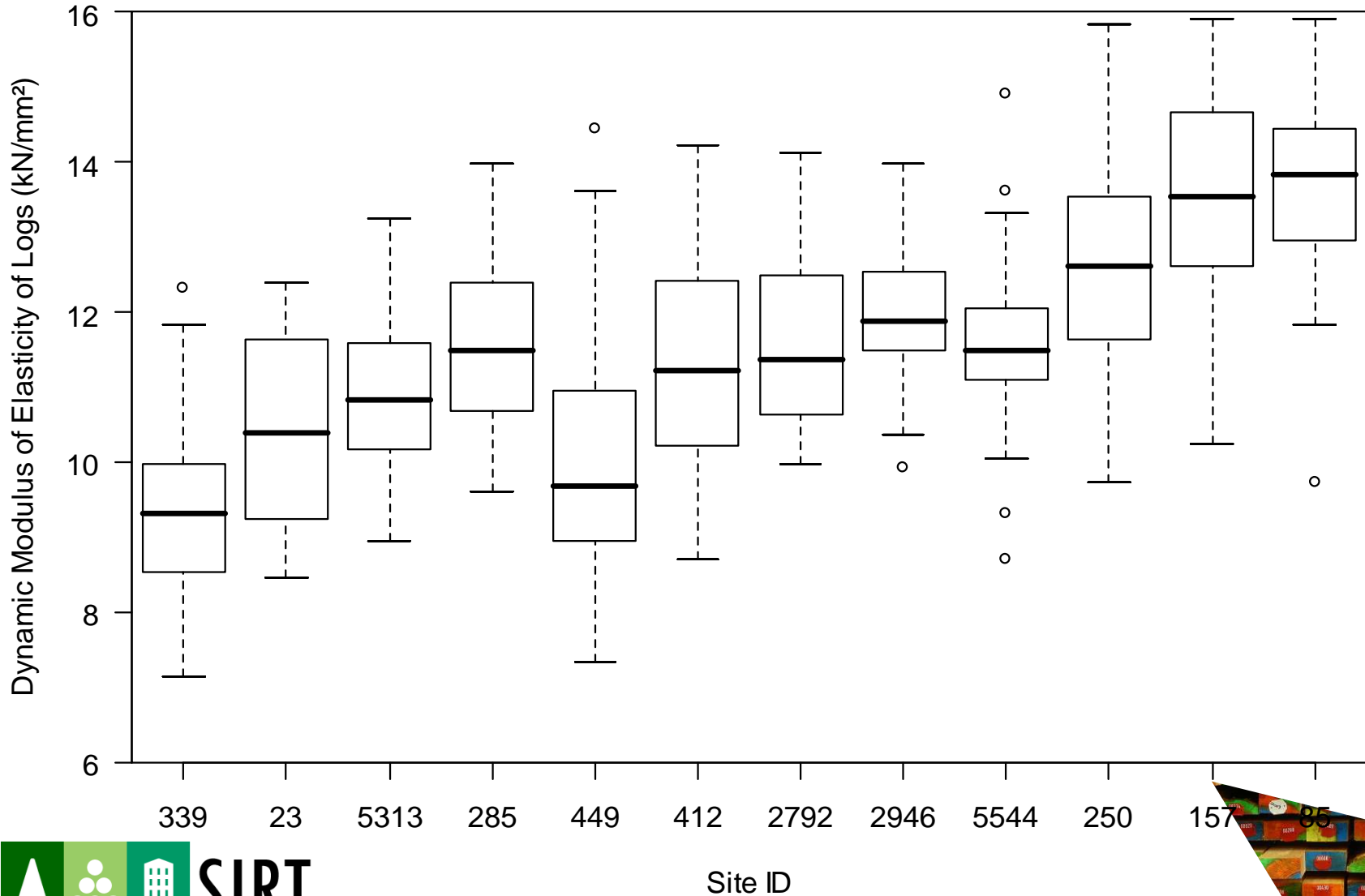
© Crown copyright. All rights reserved. Forestry Commission, 100025498.
[2009].

Strategic Integrated Research in Forestry

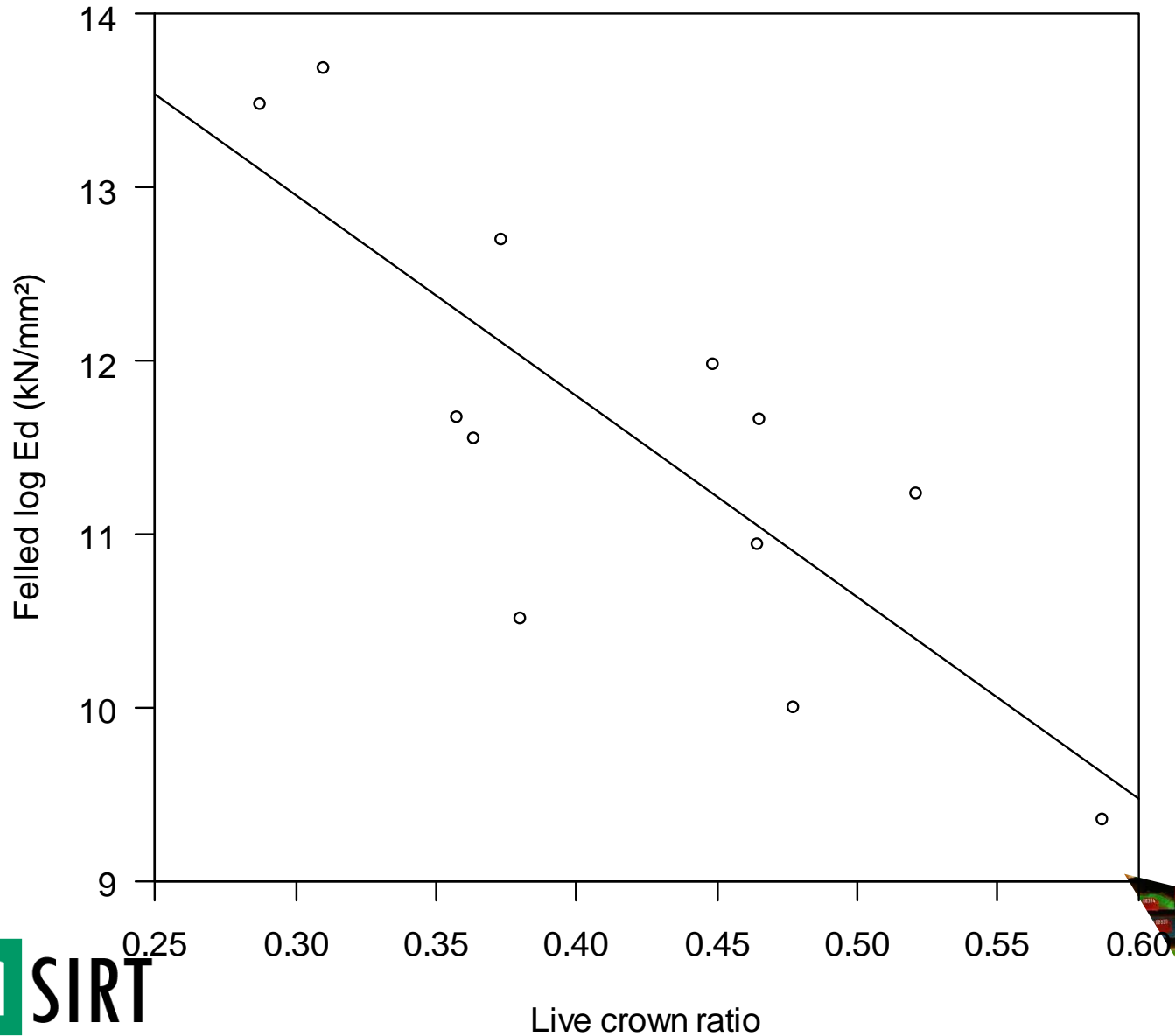
- Phase 1 – standing tree measurements
- Investigated within and between site variation in standing tree properties
- Found that ~50% of mean tree stiffness at a site could be predicted from site and stand attributes
- Results presented at IUFRO conference on “Connections Between Forest Resources and Wood Quality” in Finland, 2008
- Paper published in *Silva Fennica*



Validation Study



Crown Length – An Indicator of WQ?

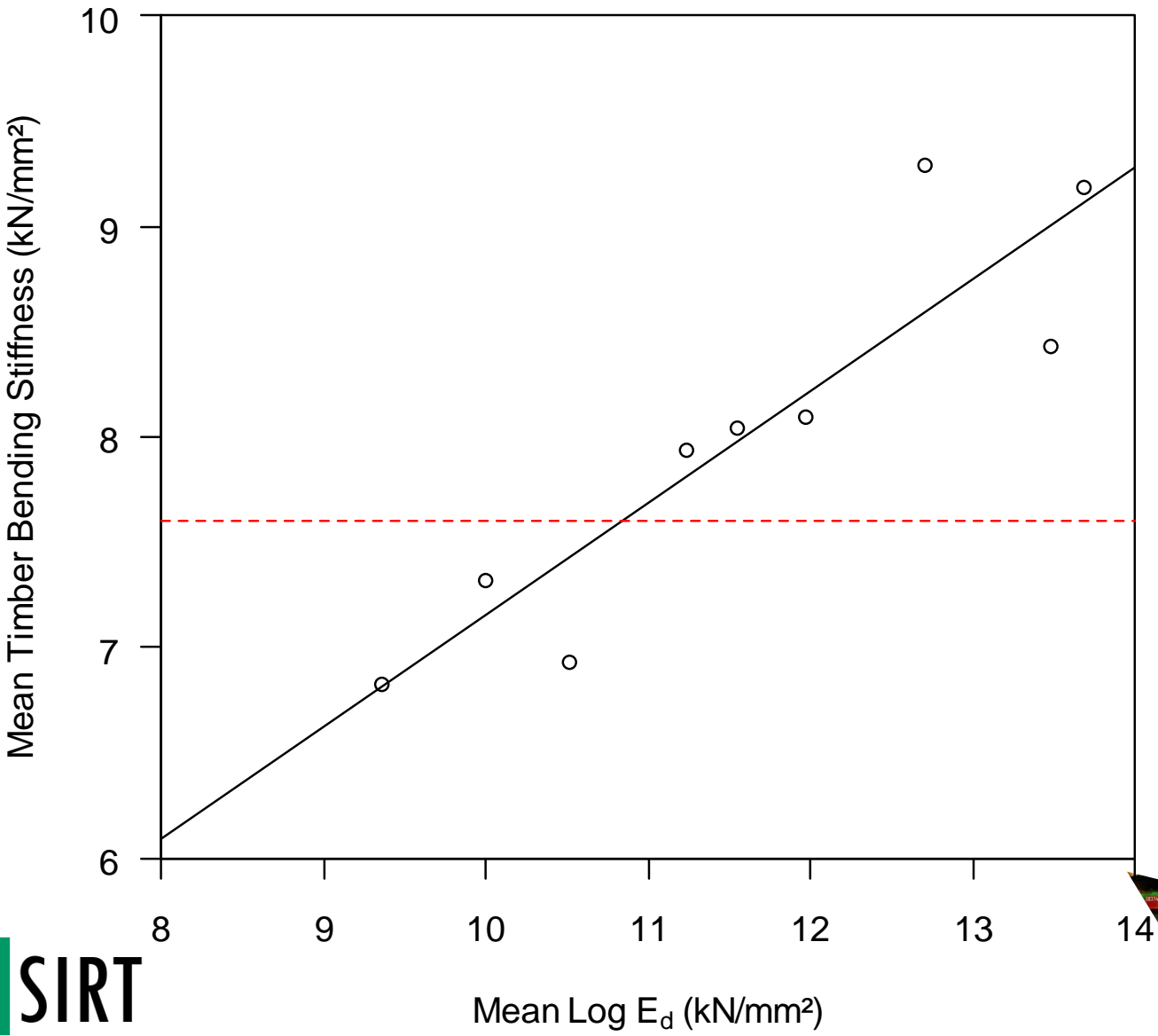


Testing of Sawn Timber

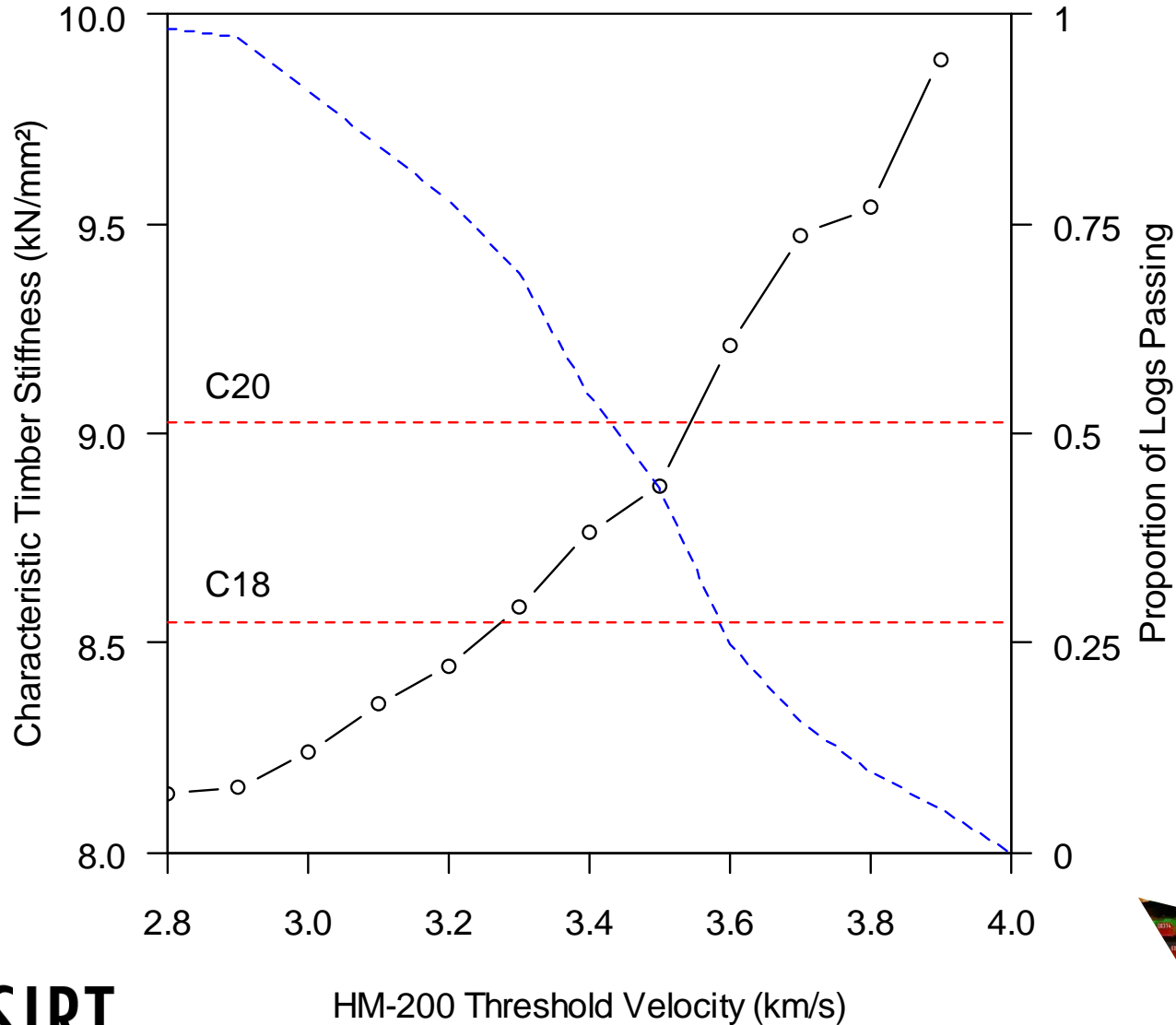
- Almost completed
 - 9 of 12 sites have been processed and timber tested
 - Remaining 3 sites have been processed and graded



Link to Sawn Timber Properties



Log-Level Segregation



Phase 3 - Extension to Other Sites

- Sampling is limited to 64 sites in northern Britain
 - Certain areas are not well represented
 - Kintyre Peninsula
 - Skye, Mull
 - Northern Scotland
 - Extend study to other areas within the UK and Ireland
 - Lake District
 - Wales
 - Welsh Marches
 - Exmoor/Dartmoor
 - Republic of Ireland and Northern Ireland
 - Workplan prepared for this component of the study
 - Fieldwork to be undertaken this autumn



Evaluation of the Timber Quality of Douglas-fir Growing in Scotland

Tom Drewett, John Moore and
Barry Gardiner



Objectives

- Obtain quantitative information on stem form and branch characteristics (size and frequency) in mature Douglas-fir
- Obtain information on heartwood extent and spiral grain angle
- Quantify the extent of variation in mechanical properties of Douglas-fir sawn timber and related these to non-destructive measurements made on logs and standing trees



Project Information

- Project is being undertaken as an MRes dissertation by Tom Drewett
 - Supervisors are John Moore and Barry Gardiner
 - 18 month time frame (commenced in September 2009)
- Sponsored by Timber Development Programme, Edinburgh Napier University and Forest Research
- Currently reviewing literature on Douglas-fir, developing field methods and identifying study sites
 - Field work will commence in May

