**Overview**

This standard is about the measuring and assessing the volume and quality of felled timber using appropriate methods and tools.

This standard includes providing information for calculations of sustainable yields, but excludes the actual calculations.

This standard is suitable for those responsible for assessing timber in the forest.
LANTw67 - SQA Unit Code H2RM 04
Measure and assess felled timber volume and quality

Performance criteria

You must be able to:

- **P1** measure and record the volume of felled timber in line with the specification
- **P2** use and maintain appropriate measuring equipment
- **P3** assess the quality of a given quantity of felled timber
- **P4** maintain the health and safety of yourself and others at all times in accordance with current legislation
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Knowledge and understanding

You need to know and understand:

K1 how to identify hazards and comply with the control measures of risk assessments
K2 how to use sawlog rulers and metric volume tables
K3 classification and presentation of softwood sawlogs
K4 how to use hoppus feet tables when forecasting timber volumes for large broadleaved trees
K5 how to measure, record and calculate the volume of felled timber for stock taking, for ascertaining sale type and payment in relation to work done
K6 how to use computer volume calculation packages
K7 how to use computerised callipers
K8 relationships between over band (O/B), under band (U/B), tonnes based on species, size and age of timber, time of year and length of time felled
K9 how to identify tree species from felled material
K10 features of different species of wood and how this affects quality and potential value
K11 different grades of timber and their relative value
K12 your responsibilities under current environmental, health and safety legislation and codes of practice
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Scope/range related to knowledge and understanding

Measure:
1 individual logs and poles
2 individual trees
3 small roundwood

Volume of felled timber:
1 top diameter under bar (U/B) and mid-diameter over bar (O/B) × length (for logs and poles)
2 average top diameter × length (for small roundwood estimates)
3 average length × height × breadth × c/f for air space (for stacked volume)
4 measurement of volume and conversion to cubic metres U/B
5 cubic metres over bar (O/B) – tonnes/m³ conversion factor
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