

Teagasc Timber Measurement Course

Thinning Assessment Plot calculations

Tree stocking

Plot size = 0.01 HA (100 sq. metres)

Plot width (between 5 rows of trees) = m

100 / width = plot length (m)

Number of trees counted in two rows either side of brush path (mid-point) for length of plot
= N

Number of trees per hectare = N x 100

DBH (diameter at breast height (1.3 m)) assessment

| DBH | NO. TREES | ARITHMETIC |
|--------|-----------|------------|
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| TOTALS | (n) | (Ta) |

Arithmetic mean dbh = Ta/n = cm

MEAN DBH (Quadratic) = **cm (rounded down)**

TOP HEIGHT = m

FORM HEIGHT(from table) = m

THIN DIAMETER = Mean dbh – 2 = **cm**

THIN MEAN VOL. TREE =

(Thin dia. X Thin dia.) X 0.00007854 X Form height = **m³**

REMOVE 30% STEMS = Stocking per ha X 0.3 = Thin stems per ha =

THIN VOL. TO BE REMOVED = Thin stems per ha X Thin mean vol. = **m³/ha**