

WORKED EXAMPLE

FORESTRY COMMISSION

VOLUME ESTIMATE — THINNINGS / FELLINGS

CONSERVANCY WEST (WALES) FOREST CADER COMPT. NO. 68
 SPECIES SITKA SPRUCE AREA 6.5 ha. AGE (Yrs) 30 YIELD CLASS 20
 SAMPLING SCHEME A DATE MEASURED 4/72 SIGNATURE S. JAMES

A.

Species	Totals		Average vol. per tree m ³	Average d b h cm	Volume* m ³ to	
	No. of trees (2)	Volume m ³ (3)			18 cm top diam (6)	24 cm top diam (7)
SITKA SPRUCE	2169	437.8	0.202	18	122.6	4.4

Estimated No. of tops to be used
 No. of unmeasurable trees to be felled

*From assortment tables.

D. DETAILS OF SAMPLE TREES FELLED AND MEASURED

Tree No.	d b h cm	Length to 7 cm top diam	Mid diam cm	Volume m ³	Tariff No.	Tree No.	d b h cm	Length to 7 cm top diam	Mid diam cm	Volume m ³	Tariff No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	18	12	15	0.21	30	26					
2	20	13	15	0.23	26	27					
3	21	13	17	0.30	31	28					
4	15	8.9	13	0.118	26	29					
5	21	14	17	0.32	33	30					
6	25	15	18	0.38	26	31					
7	19	14	15	0.25	32	32					
8	17	11	13	0.15	24	33					
9	15	10	13	0.133	29	34					
10	19	13	15	0.23	29	35					
11	18	12	15	0.21	30	36					
12	20	14	16	0.28	32	37					
13	19	13	15	0.23	29	38					
14	17	11	14	0.17	28	39					
15	14	9.4	12	0.106	28	40					
16	9	—	—	—	—	41					
17	12	9.5	10	0.075	30	42					
18	24	15	18	0.38	29	43					
19	20	14	15	0.25	28	44					
20	16	12	13	0.16	30	45					
21	18	13	14	0.20	29	46					
22	18	11	15	0.19	27	47					
23	16	12	13	0.16	30	48					
24	27	18	20	0.57	34	49					
25						50					
Total c. fvd					670	Total bc. fvd					
						GRAND TOTAL					670

Mean Tariff Number =
 U15

Grand Total of Tariff Nos.
 No. of sample trees
 (Omit trees of 7, 8 and 9 cm d b h)

$\frac{670}{23} = 29.1 = 29$ (rounded down)

B. RECORD OF TREES MARKED By Gate method — one gate to each square

[illegible]

C. TREES GIRTHED

[illegible]

*(Col. 4) Multiplication factor=

$$\frac{\text{No. of trees in stand}}{\text{No. of trees in sample}}$$
$$\frac{2171}{241} = 9$$

Grand Totals

241

2169

437.8

t(Col. 5). Volume per tree is obtained from the Tariff Tables using column appropriate for mean Tariff number