

Semi-empirical estimation of log taper using stem profile equations

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Electronic Supplementary Material (ESM)

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Table S1. Probability of distribution of trees by diameter and height classes of mature Scots pine stands, 10⁴

DBH (cm)		Height (m)																													
		12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39		
12	0.2	1.0	3.7	10.0	19.9	28.9	30.7	23.9	13.7	5.7	1.8	0.4																			
16				2.5	6.3	16.5	34.6	57.8	76.9	81.4	68.6	46.0	24.6	10.5	3.5	1.0															
20					2.2	5.6	15.9	37.3	73.0	118.7	160.7	181.1	169.8	132.5	86.1	46.4	20.9	7.8	2.4												
24						6.8	13.7	33.5	70.0	124.9	191.2	250.7	281.4	270.7	223.1	157.4	95.2	49.3	21.9	8.3	2.7										
28							6.5	12.5	30.2	63.0	115.0	182.8	253.7	307.1	324.5	298.9	240.2	168.4	103.0	54.9	25.5	10.4	3.7								
32								7.5	13.0	29.4	58.7	103.3	159.7	217.8	261.7	277.0	258.4	212.4	153.7	98.1	55.1	27.3	11.9	4.6							
36									2.8	5.1	12.1	25.5	47.7	79.1	116.1	151.2	174.7	178.9	162.5	130.9	93.5	59.2	33.2	16.6	7.3	2.9					
40										1.0	1.9	4.6	9.9	19.2	33.2	51.0	69.9	85.1	92.3	89.2	76.7	58.6	40.0	24.3	13.1	6.3	2.7	1.0			
44											0.9	1.5	3.3	6.6	11.8	18.7	26.5	33.7	38.1	38.6	34.8	28.1	20.2	13.0	7.5	3.8	1.8	0.7			
48											0.3	0.4	1.0	2.1	3.8	6.2	9.0	11.8	13.9	14.6	13.7	11.6	8.7	5.9	3.6	1.9	0.9	0.4	0.2		
52											0.1	0.1	0.2	0.5	0.9	1.5	2.3	3.1	3.7	3.9	3.8	3.3	2.5	1.8	1.1	0.6	0.3	0.1	0.1		
56												0.1	0.1	0.3	0.5	0.7	1.0	1.2	1.3	1.3	1.1	0.9	0.7	0.4	0.2	0.1	0.1				
DBH – diameter at breast height																															

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Table S2. Probability of distribution of trees by diameter and height classes of mature common oak stands, 10⁴

DBH (cm)	Height (m)																											
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
12	0.4	1.6	5.2	10.8	15.1	13.9	8.5	3.4	0.9	0.2																		
16		0.8	2.8	8.5	19.6	33.9	44.0	42.7	31.1	17.0	6.9	2.1	0.5															
20				2.2	5.9	16.2	35.3	61.5	86.0	96.1	86.0	61.5	35.3	16.2	5.9	1.7												
24					2.0	5.3	14.8	34.5	67.2	108.5	145.8	162.8	151.3	116.8	75.0	40.0	17.8	6.6	2.0									
28						2.1	5.0	14.0	33.0	66.5	114.3	167.4	209.2	222.8	202.6	157.0	103.8	58.5	28.1	11.5	4.0							
32							3.3	7.1	18.5	41.2	79.7	132.9	191.6	238.3	256.4	238.3	191.5	132.8	79.7	41.2	18.5	7.1	2.4					
36								5.4	10.2	24.3	50.3	91.1	143.4	196.8	235.3	245.2	222.7	176.2	121.5	73.1	38.2	17.4	6.9	2.4				
40								2.7	5.5	13.6	29.5	56.2	94.1	137.8	177.0	199.4	196.7	170.1	129.0	85.8	49.9	25.5	11.4	4.5	1.5			
44							1.4	2.9	7.3	16.4	32.3	56.1	85.7	114.9	135.7	141.0	129.0	103.8	73.5	45.7	25.0	12.1	5.1	1.9				
48								2.1	3.7	8.4	16.9	30.0	47.2	65.4	80.0	86.2	82.0	68.8	50.9	33.2	19.1	9.7	4.4	1.7				
52									0.9	1.6	3.6	7.5	13.6	22.0	31.4	39.7	44.3	43.7	38.2	29.5	20.2	12.2	6.5	3.1	1.3	0.5		
56									0.3	0.6	1.4	2.9	5.5	9.1	13.4	17.4	20.1	20.6	18.7	15.1	10.8	6.8	3.8	1.9	0.8	0.3		
60									0.1	0.2	0.4	0.9	1.7	2.8	4.2	5.5	6.5	6.9	6.4	5.3	3.9	2.5	1.5	0.8	0.3	0.1	0.1	
64										0.1	0.2	0.3	0.6	1.1	1.6	2.2	2.6	2.7	2.6	2.2	1.6	1.1	0.6	0.3	0.2	0.1		

DBH – diameter at breast height