

Table S2. Cost calculation for feller buncher

	A	B	C
1		Feller Buncher	
2	Time	Base Year	
3	Production	Summer	Winter
4	Annual Production (m ³)	750,000	1,400,000
5	Days	106	83
6	Hours/Day	21	19
7	Input		
8	Annual Available Hours	2,226	1,577
9	Utilization Percentage [42]	65	65
10	Annual Production Hours	1,447	1,025
11	Expected Life (Years) [49]	5.00	
12	Purchase Information		
13	Equipment Purchase Cost (\$) [43]	377,000	
14	Salvage Value (%) [49]	0.15	
15	Fuel Price (\$) [41]	1.00	
16	Oil Lube Costs (%) [41]	0.10	
17	Insurance Costs (%) [41]	0.035	
18	Load Factor	0.25	
19	Salvage Value (\$)	56,550	
20	Rate of Return on Total Capital	0.10	
21	Average Annual Equipment Value (\$)	216,775	
22	Fuel Consumption (lt/hr) [50]	41.60	42.60
23	Ownership Costs		
24	Depreciation (\$/year)	64,090	
25	Insurance (\$/year)	7,587	
26	Return on Capital (\$/year)	21,678	
27	Annual Ownership Costs (\$/year)	93,355	
28	Total Ownership Costs (\$/year)	1,773,738	
29	Total Ownership Unit Cost (\$/m³)	0.82	
30	Labor Costs		
31	Straight Time	1,908	1,494
32	Overtime Worked	318	83
33	Wage (\$/hr) [32]	29.29	29.29
34	Overtime (\$/hr)	43.94	43.94
35	Seasonal Labor Costs (\$)	69,857	47,406
36	Add Employee Load (Benefits)	17,464	11,851
37	Total Labour Costs (\$)	87,321	59,257
38	Total Labor Unit Costs (\$/m³)	1.23	1.18
39	Operation Costs		
40	Fuel cost (\$/hr)	41.60	42.60
41	Oil/Lube Cost (\$/hr)	4.16	4.26
42	Fuel & Lube Cost (\$/m ³)	0.09	0.03
43	Repair & Maintenance Costs (\$/year)	32,045	
44	Repair & Maintenance Costs (\$/m ³)	0.264	
45	Total Operation Costs (Season)	75,510	55,316
46	Total Operation Unit Costs (\$/m³)	1.06	1.10
47	Total Equipment Unit Costs (Seasonal) (\$/m³)	3.12	3.10
48	Number of Equipments	7	19
49	Prodcutivity (m ³ /Pmh) ¹	61.35	61.35
50	Availability (%)	0.80	0.80
51	Productivity (m ³ /Smh)	49.08	49.08
52	¹ obtained from contractor		