Woodlot Management
FACT SHEET
A series of information sheets to help woodlot owners manage their private forests.

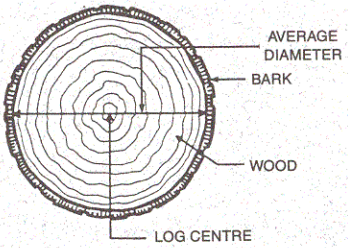
LOG VOLUME (METRIC MEASUREMENT)

Accurate measurement of logs and log volume is important. It will help ensure you get the most of your stack of logs. The volume of a log can be calculated into cubic metres (m^3) by: measuring the length of the log in metres, plus the diameter of the log at its small end in centimeters (cm). Once you have taken these two measurements, use them with the table below to determine log volume.

Standard lengths are: 1.9m (6 ft), 2.5m (8 ft), 3.1m (10 ft), 3.7m (12 ft), 4.3m (14 ft), 5.1m (16 ft). Common lengths for lumber measurements are: 2.5m, 3.7m and 5.1m.

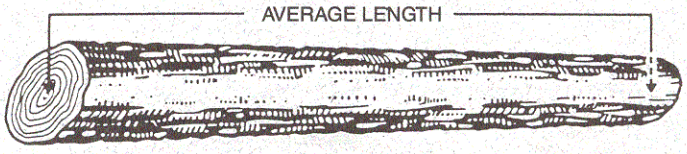
DIAMETER MEASUREMENTS

Diameters are measured in two centimetre classes across the small end of a log. The diameter should be taken inside the bark. However, when a measurement at a log end is not possible, the outside bark diameter may be used, but with a corresponding reduction for bark thickness.



LOG LENGTH MEASUREMENT

Log lengths are measured in metres accurate to one decimal place. Lengths are determined using tape measures or approved scale sticks.



DEFECT MEASUREMENT

Deductions are made for missing and charred wood, rot and advanced decay. The volume of a defect is determined using the geometric solid which best represents the shape of the defect.

LOG VOLUME IN CUBIC METRES OF TAPERING CYLINDERS

DIAM (SMALL END) CM	LENGTH IN METRES 1.9	2.5	3.1	3.7	4.3	5.1
4	0.004	0.005	0.007	0.010	0.013	0.017
6	0.007	0.010	0.014	0.018	0.022	0.029
8	0.012	0.017	0.022	0.028	0.035	0.045
10	0.018	0.025	0.032	0.041	0.050	0.063
12	0.025	0.034	0.045	0.056	0.068	0.085
14	0.033	0.046	0.059	0.073	0.088	0.110
16	0.043	0.058	0.075	0.093	0.111	0.138
18	0.054	0.073	0.093	0.115	0.137	0.169
20	0.065	0.089	0.113	0.139	0.166	0.204
22	0.079	0.106	0.135	0.165	0.197	0.241
24	0.093	0.125	0.159	0.194	0.231	0.282
26	0.108	0.146	0.185	0.225	0.268	0.326
28	0.125	0.168	0.213	0.259	0.307	0.374
30	0.143	0.192	0.242	0.295	0.349	0.424
32	0.162	0.217	0.274	0.333	0.394	0.478
34	0.182	0.244	0.308	0.373	0.441	0.535
36	0.204	0.272	0.343	0.416	0.492	0.595
38	0.226	0.302	0.381	0.461	0.544	0.659
40	0.250	0.334	0.420	0.509	0.600	0.725

DIAM (SMALL END) CM	LENGTH IN METRES 1.9	2.5	3.1	3.7	4.3	5.1
42	0.275	0.367	0.462	0.559	0.658	0.795
44	0.302	0.402	0.505	0.611	0.719	0.868
46	0.329	0.438	0.550	0.665	0.783	0.944
48	0.358	0.476	0.598	0.722	0.849	1.024
50	0.387	0.516	0.647	0.781	0.918	1.106
52	0.418	0.557	0.698	0.843	0.990	1.192
54	0.451	0.599	0.751	0.906	1.065	1.281
56	0.484	0.644	0.806	0.973	1.142	1.373
58	0.519	0.689	0.863	1.041	1.222	1.469
60	0.554	0.737	0.922	1.112	1.304	1.567
62	0.591	0.786	0.983	1.185	1.390	1.669
64	0.630	0.836	1.046	1.260	1.478	1.774
66	0.669	0.888	1.111	1.338	1.569	1.882
68	0.709	0.942	1.178	1.418	1.662	1.994
70	0.751	0.997	1.246	1.500	1.758	2.108
72	0.794	1.054	1.317	1.585	1.857	2.226
74	0.838	1.112	1.390	1.672	1.958	2.347