9. Appendices

9.1 Study Area 1 Transects and Individual Results

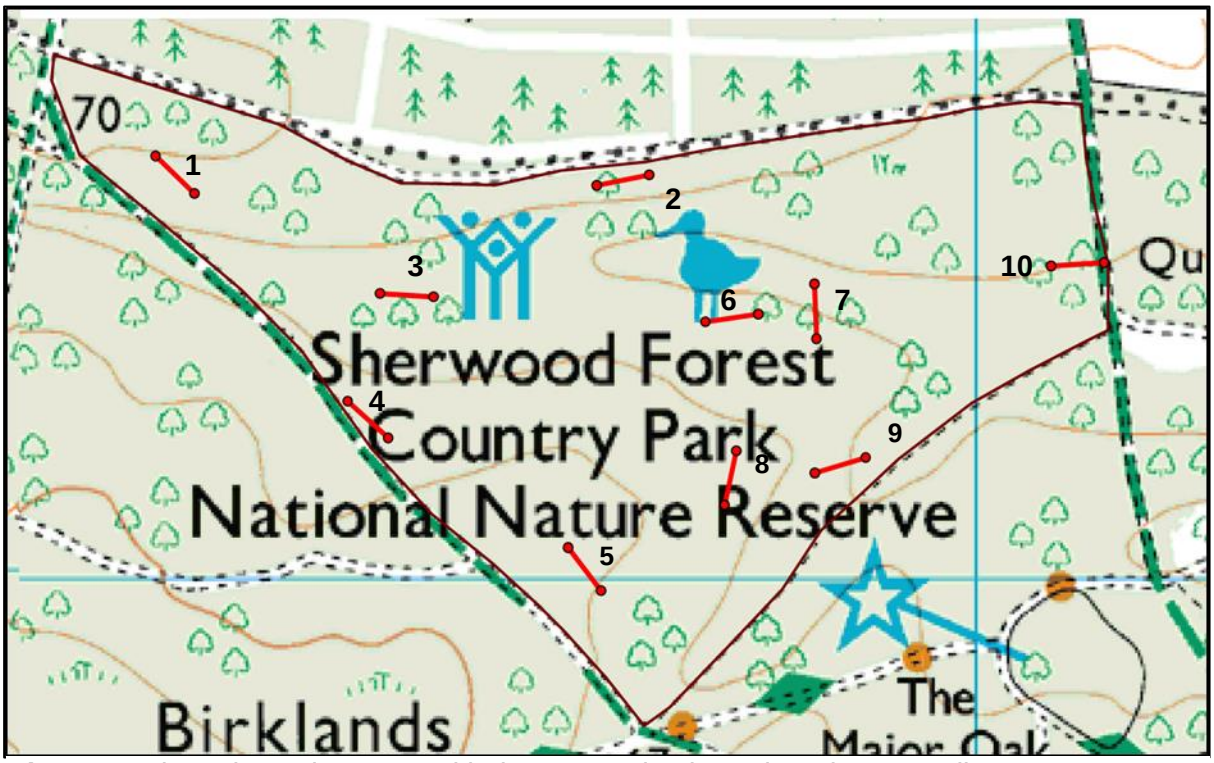


Figure 1: *Above is study area 1 with the ten randomly assigned transect lines.*

Transect	Easting	Northing
1	461233	368384
1	461269	368350
2	461646	368357
2	461695	368366
3	461443	368259
3	461493	368256
4	461413	368161
4	461451	368128
5	461650	367989
5	461619	368028

Transect	Easting	Northing
6	461748	368233
6	461797	368240
7	461852	368218
7	461850	368268
8	461766	368067
8	461777	368116
9	461898	368110
9	461850	368096
10	462121	368287
10	462071	368284

Chart 1: *Above are the British National Grid easting and northing coordinates for the starting and ending points of each transect line shown in* ***Figure 1*** *for study area 1.*

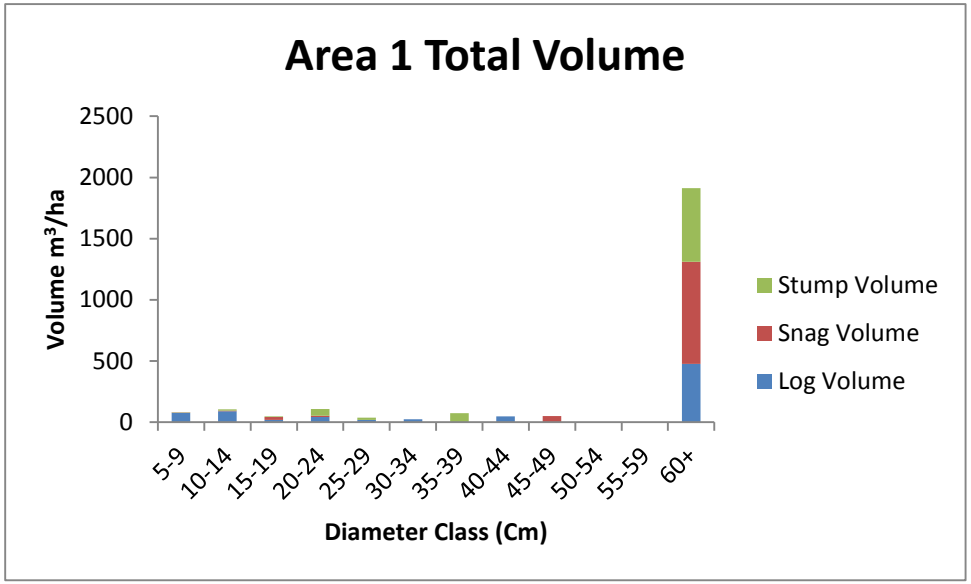


Figure 2: *Above presents the total volume within each Diameter class for area 1 within Sherwood Forest NNR*

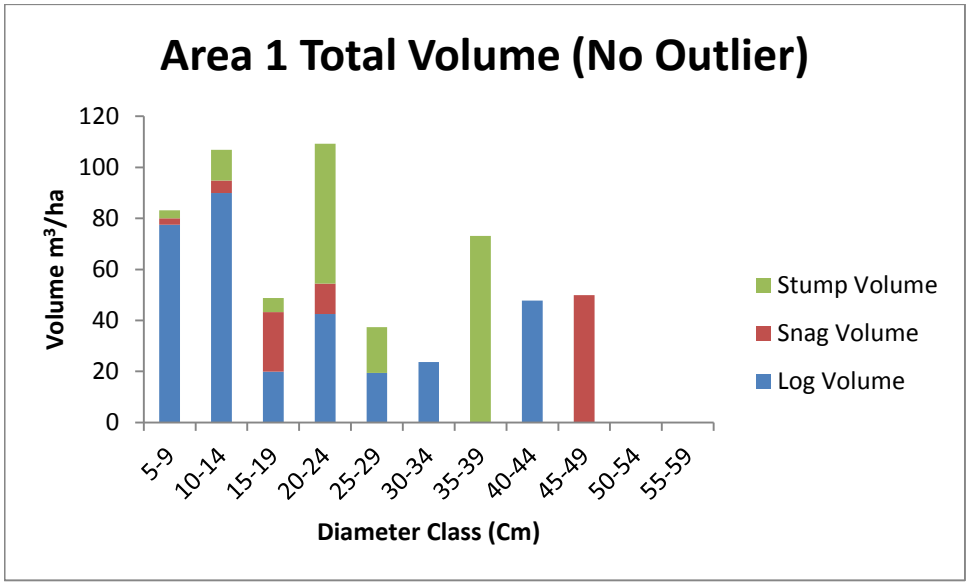


Figure 3: *Above presents the total volume within each Diameter class for area 1 within Sherwood Forest NNR, with the exception of Diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	77.53	89.94	19.86	42.51	19.34	23.71	0.00	47.77	0.00	0.00	0.00	476.73	797.39	19.93
Snag Volume	2.47	4.84	23.37	11.94	0.00	0.00	0.00	0.00	49.96	0.00	0.00	833.98	926.56	23.16
Stump Volume	3.16	12.09	5.55	54.83	17.99	0.00	73.16	0.00	0.00	0.00	0.00	602.39	769.16	19.23
Area 1 Volume Total	83.15	106.86	48.78	109.28	37.33	23.71	73.16	47.77	49.96	0.00	0.00	1913.10	2493.11	62.33

Chart 2: *Above shows total volume m^3/ha for each individual Diameter class for study area 1 rounded to the second decimal place. The following results produced* ***Figure 2*** *and* ***3****.*

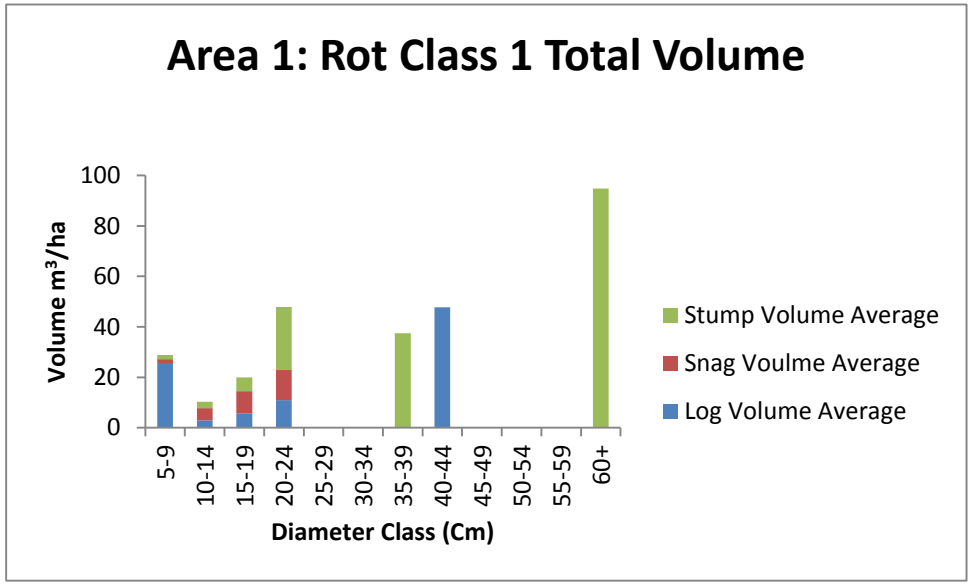


Figure 4: *Above represents total volume of dead wood that fell within rot 1 classification from study area 1 within Sherwood Forest NNR.*

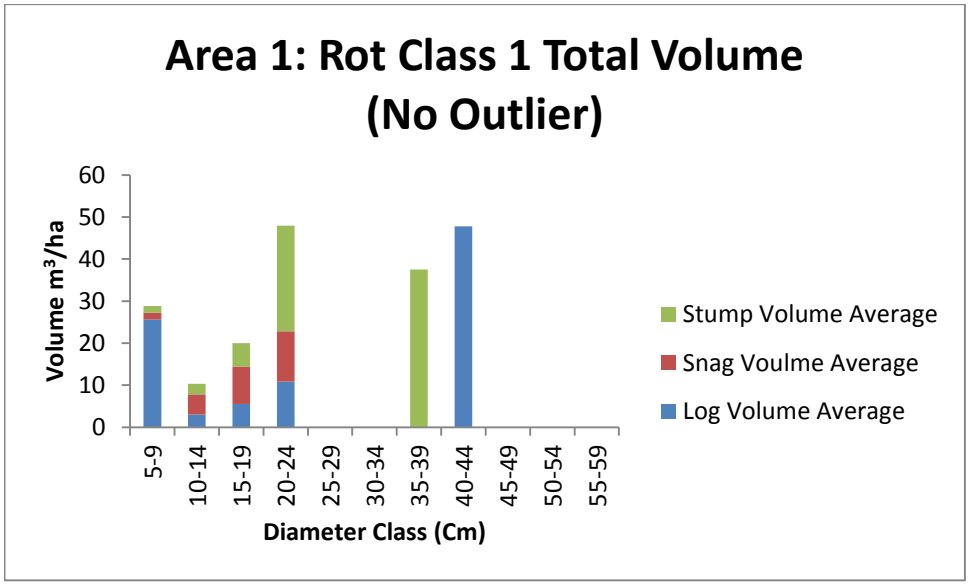


Figure 5: *Above represents total volume of dead wood that fell within rot 1 classification from study area 1 within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	25.66	2.99	5.55	10.88	0.00	0.00	0.00	47.77	0.00	0.00	0.00	0.00	92.85	9.28
Snag Volume Average	1.58	4.84	8.91	11.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.26	2.73
Stump Volume Average	1.58	2.47	5.55	25.09	0.00	0.00	37.53	0.00	0.00	0.00	0.00	94.85	167.07	16.71
Total Volume Average	28.82	10.29	20.01	47.92	0.00	0.00	37.53	47.77	0.00	0.00	0.00	94.85	287.18	28.72

Chart 3: *Above shows total volume of dead wood that fell within rot 1 classification for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 4*** *and* ***Figure 5****.*

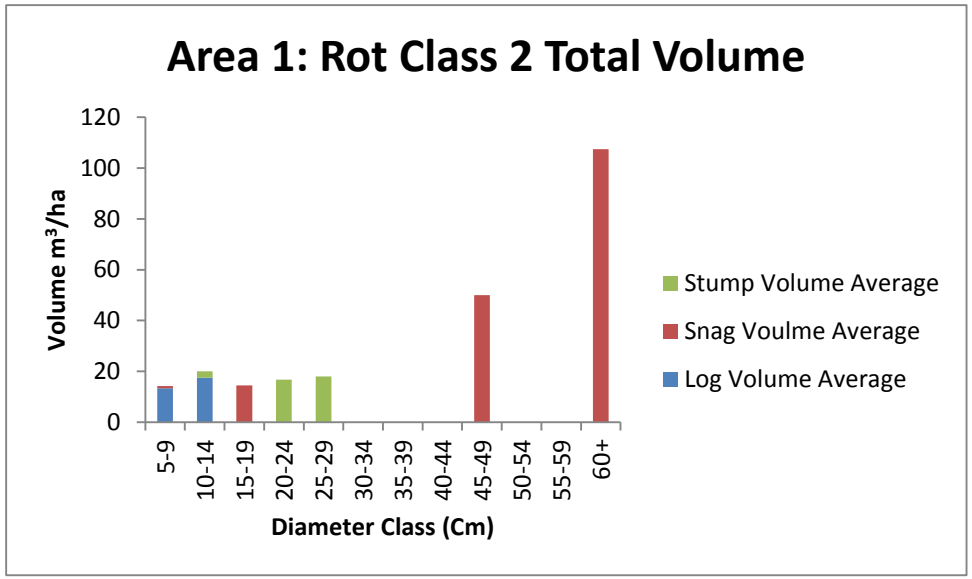


Figure 6: *Above represents total volume of dead wood that fell within rot 2 classification from study area 1 within Sherwood Forest NNR.*

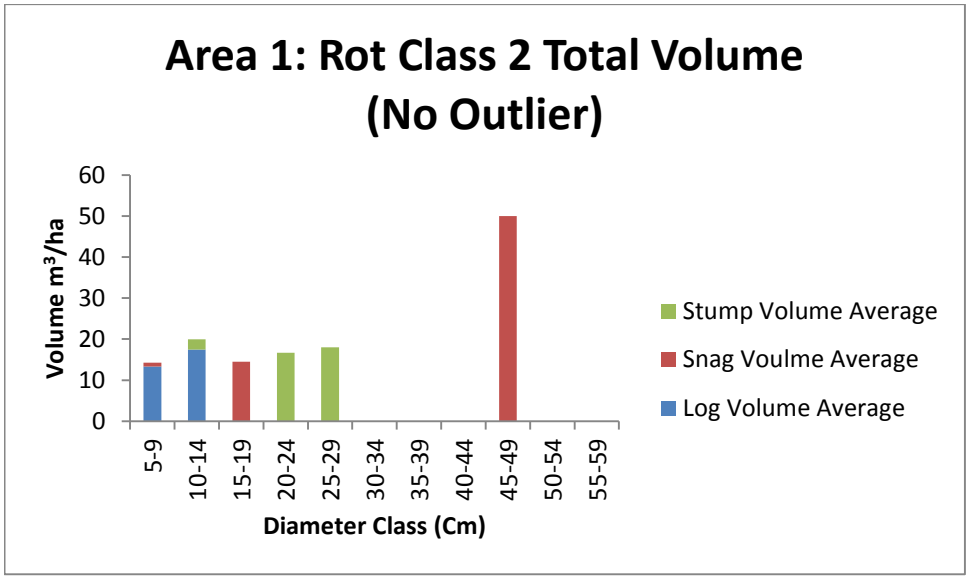


Figure 7: *Above represents total volume of dead wood that fell within rot 2 classification from study area 1 within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	13.35	17.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.84	3.08
Snag Volume Average	0.89	0.00	14.46	0.00	0.00	0.00	0.00	0.00	49.96	0.00	0.00	107.48	172.79	17.28
Stump Volume Average	0.00	2.47	0.00	16.68	17.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.13	3.71
Total Volume Average	14.24	19.96	14.46	16.68	17.99	0.00	0.00	0.00	49.96	0.00	0.00	107.48	240.77	24.08

Chart 4: *Above shows total volume of dead wood that fell within rot 2 classification for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 6*** *and* ***Figure 7****.*

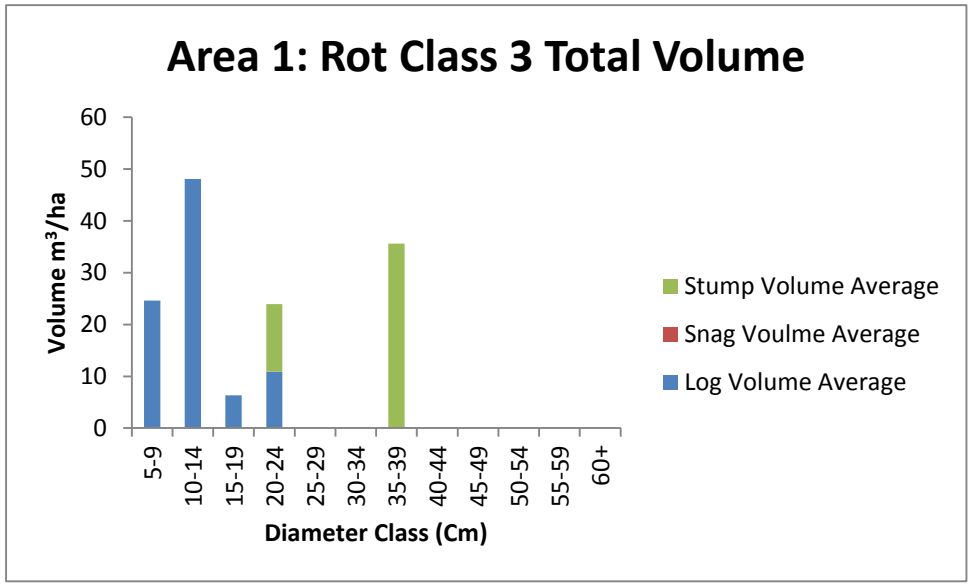


Figure 8: *Left represents total volume of dead wood that fell within rot 3 classification from study area 1 within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Chart 5: *Below shows total volume of dead wood that fell within rot 3 classification for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 8****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	24.65	48.11	6.32	10.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.96	9.00
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume Average	0.00	0.00	0.00	13.05	0.00	0.00	35.63	0.00	0.00	0.00	0.00	0.00	48.68	4.87
Total Volume Average	24.65	48.11	6.32	23.93	0.00	0.00	35.63	0.00	0.00	0.00	0.00	0.00	138.64	13.86

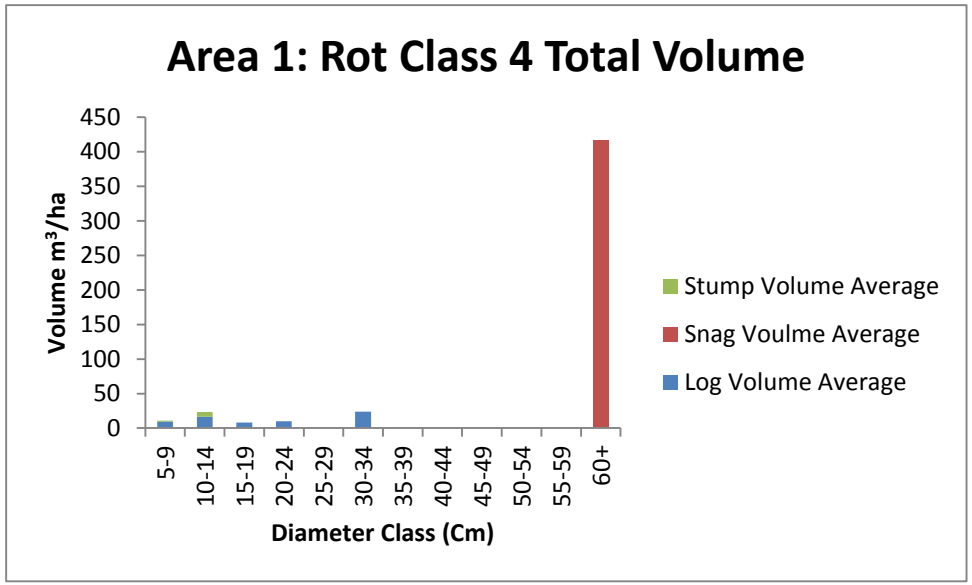


Figure 9: *Above represents total volume of dead wood that fell within rot 4 classification from study area 1 within Sherwood Forest NNR.*

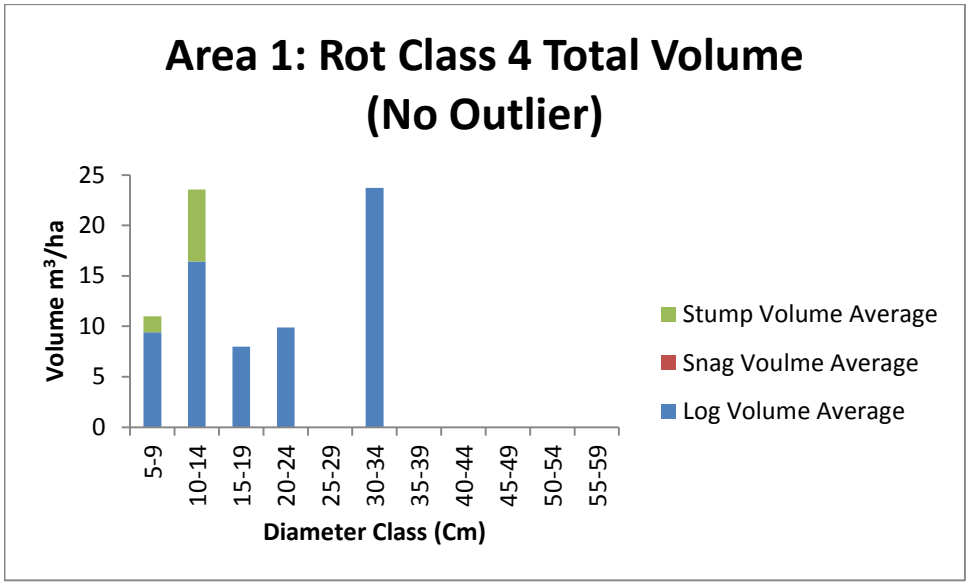


Figure 10: *Above represents total volume of dead wood that fell within rot 4 classification from study area 1 within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	9.40	16.41	7.99	9.87	0.00	23.71	0.00	0.00	0.00	0.00	0.00	0.00	67.38	6.74
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	416.99	416.99	41.70
Stump Volume Average	1.58	7.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.87
Total Volume Average	10.98	23.56	7.99	9.87	0.00	23.71	0.00	0.00	0.00	0.00	0.00	416.99	493.11	49.31

Chart 6: *Above shows total volume of dead wood that fell within rot 4 classification for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 9*** *and* ***Figure 10****.*

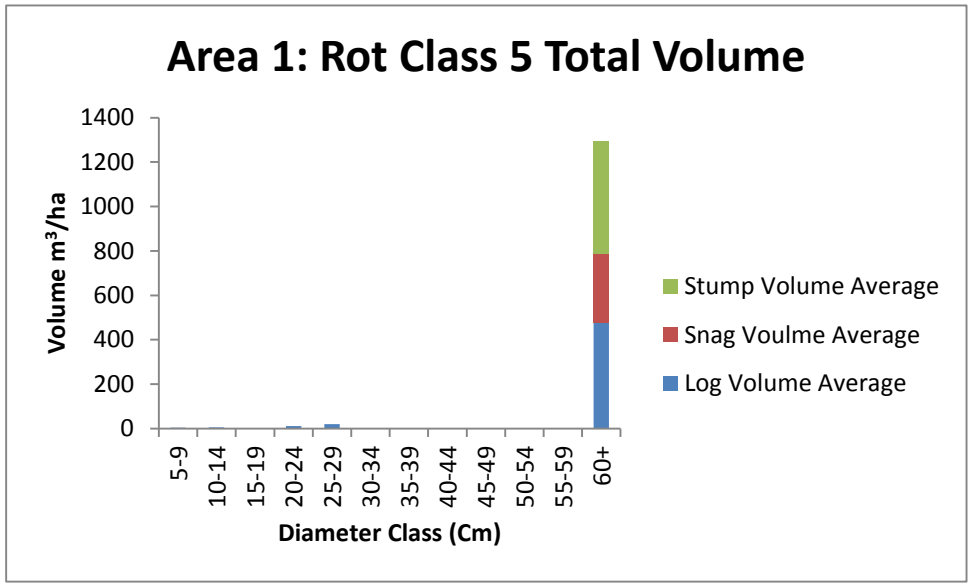


Figure 11: *Above represents total volume of dead wood that fell within rot 5 classification from study area 1 within Sherwood Forest NNR.*

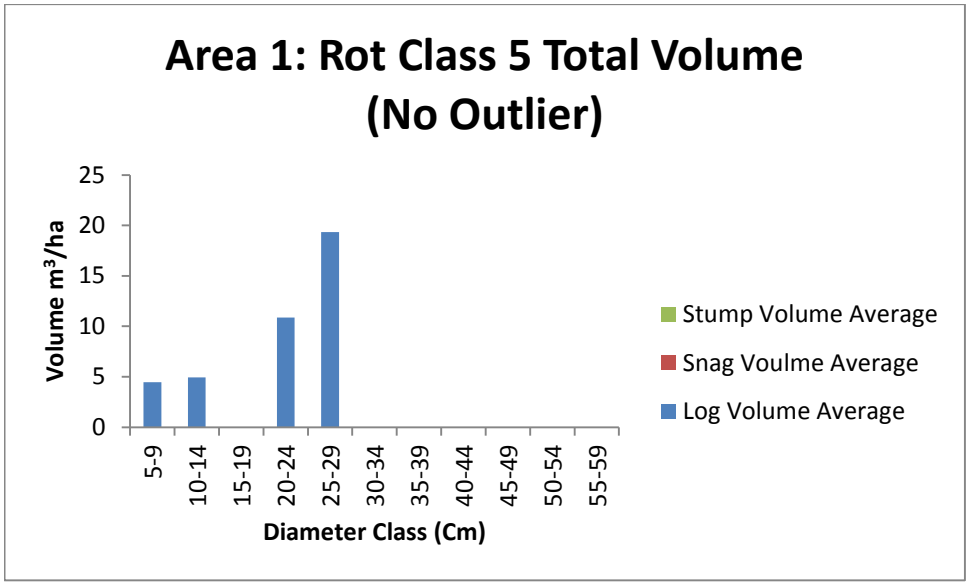


Figure 12: *Above represents total volume of dead wood that fell within rot 5 classification from study area 1 within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	4.47	4.93	0.00	10.88	19.34	0.00	0.00	0.00	0.00	0.00	0.00	476.73	516.35	51.64
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	309.51	309.51	30.95
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	507.54	507.54	50.75
Total Volume Average	4.47	4.93	0.00	10.88	19.34	0.00	0.00	0.00	0.00	0.00	0.00	1293.78	1333.41	133.34

Chart 7: *Above shows total volume of dead wood that fell within rot 5 classification for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 11*** *and* ***Figure 12****.*

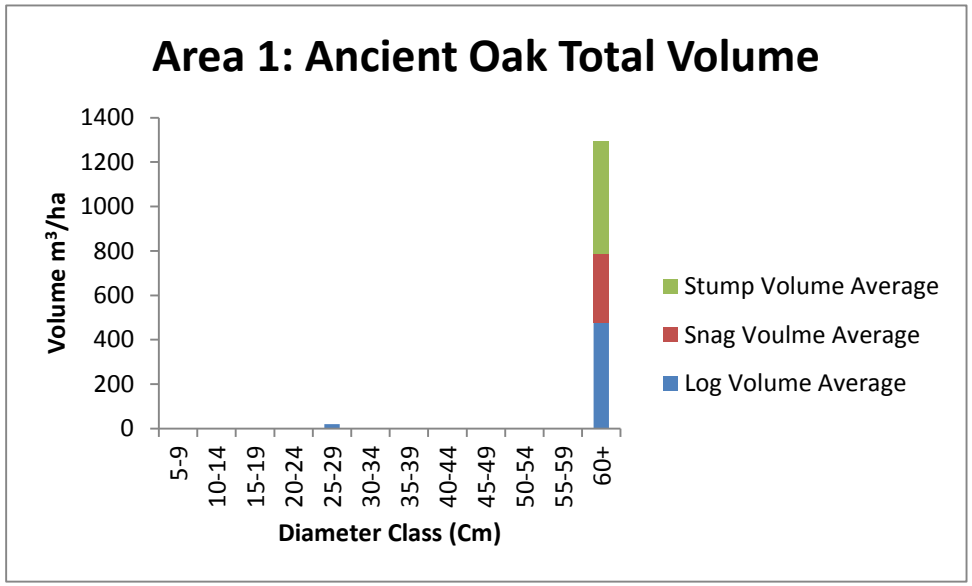


Figure 13: *Above represents total volume of ancient oak dead wood for study area 1 within Sherwood Forest NNR.*

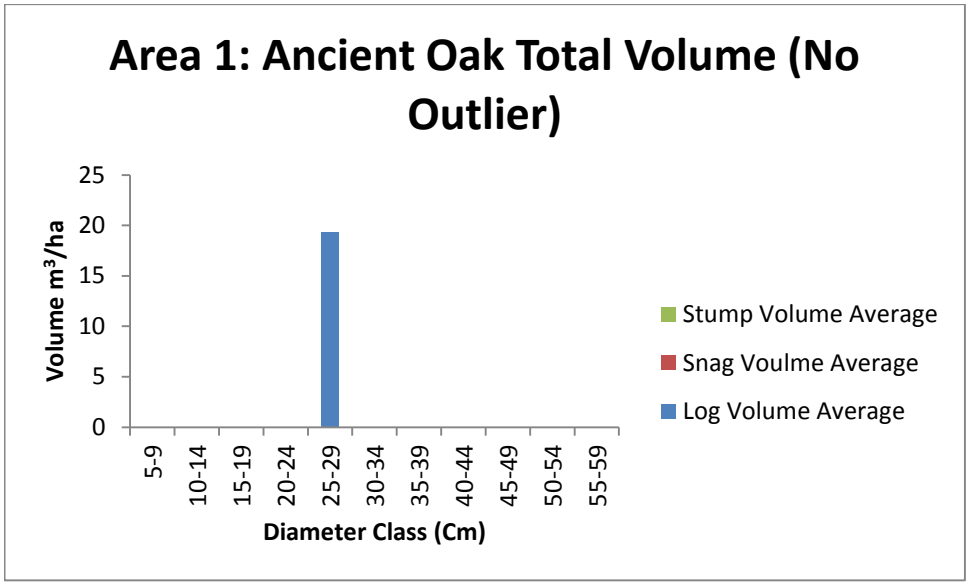


Figure 14**:** *Above represents total volume of ancient oak dead wood for study area 1 within Sherwood Forest NNR, with the exception of diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	0.00	0.00	0.00	0.00	19.34	0.00	0.00	0.00	0.00	0.00	0.00	476.73	496.07	49.61
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	309.51	309.51	30.95
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	507.54	507.54	50.75
Total Volume Average	0.00	0.00	0.00	0.00	19.34	0.00	0.00	0.00	0.00	0.00	0.00	1293.78	1313.13	131.31

Chart 8: *Above shows total volume of ancient oak dead wood for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 13*** *and* ***Figure 14****.*

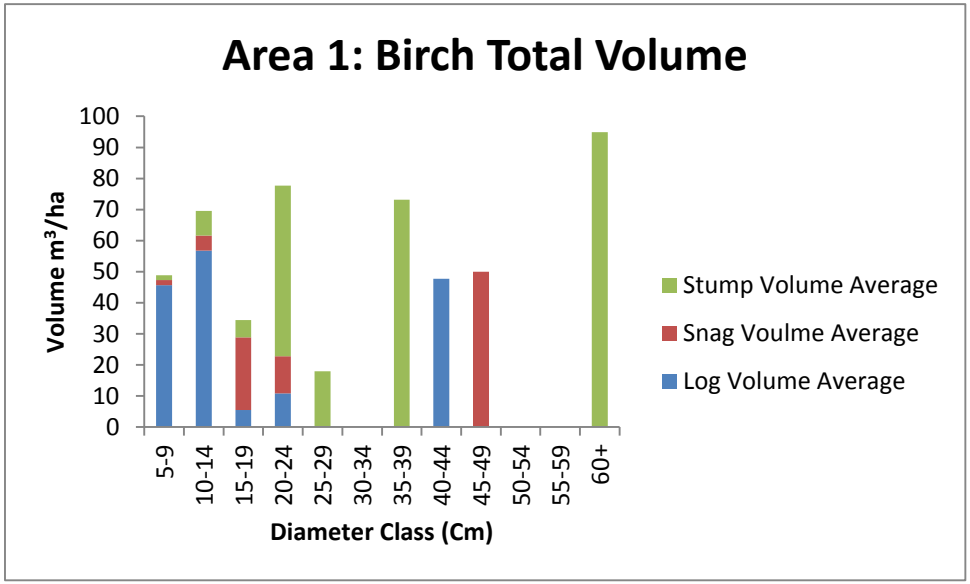


Figure 15**:** *Left represents total volume of birch dead wood for study area 1 within Sherwood Forest NNR.*

Chart 9: *Below shows total volume birch dead wood for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 15****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	45.70	56.80	5.55	10.88	0.00	0.00	0.00	47.77	0.00	0.00	0.00	0.00	166.70	16.67
Snag Volume Average	1.58	4.84	23.37	11.94	0.00	0.00	0.00	0.00	49.96	0.00	0.00	0.00	91.69	9.17
Stump Volume Average	1.58	7.92	5.55	54.83	17.99	0.00	73.16	0.00	0.00	0.00	0.00	94.85	255.87	25.59
Total Volume Average	48.85	69.56	34.47	77.65	17.99	0.00	73.16	47.77	49.96	0.00	0.00	94.85	514.26	51.43

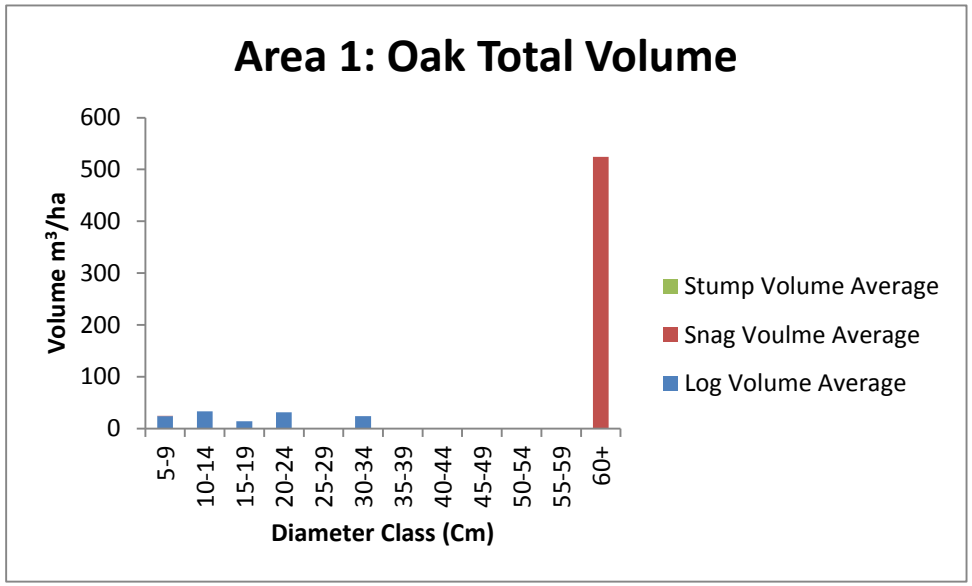


Figure 16: *Above represents total volume of oak dead wood for study area 1 within Sherwood Forest NNR.*

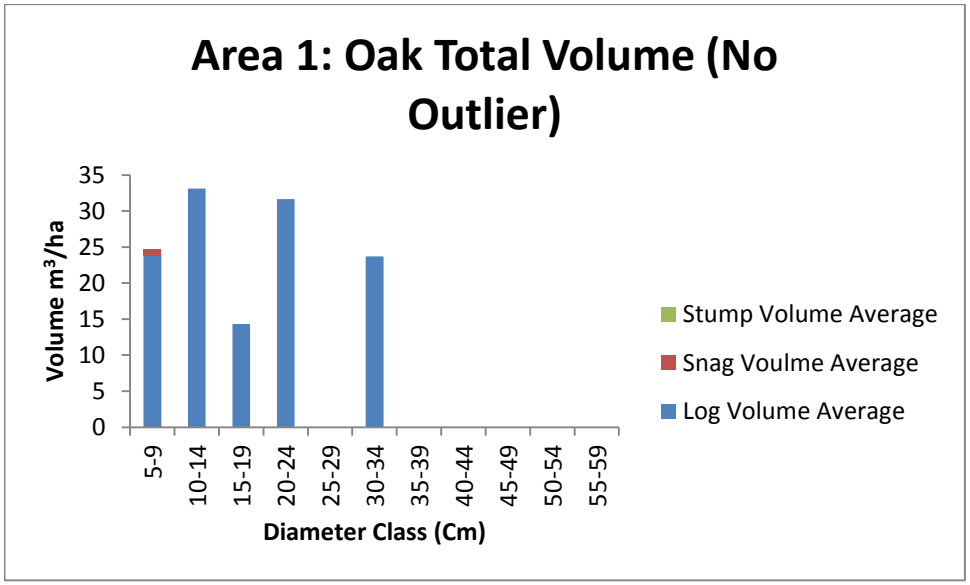


Figure 17**:** *Above represents total volume of oak dead wood for study area 1 within Sherwood Forest NNR, with the exception of diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	23.81	33.14	14.31	31.63	0.00	23.71	0.00	0.00	0.00	0.00	0.00	0.00	126.60	12.66
Snag Volume Average	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	524.47	525.36	52.54
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Volume Average	24.70	33.14	14.31	31.63	0.00	23.71	0.00	0.00	0.00	0.00	0.00	524.47	651.96	65.20

Chart 10: *Above shows total volume of oak dead wood for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 16*** *and* ***Figure 17****.*

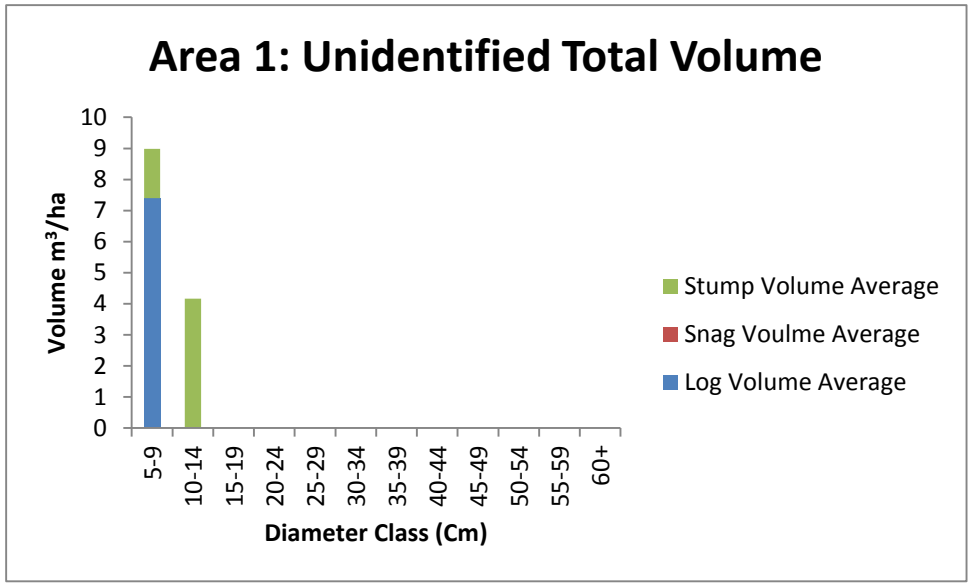
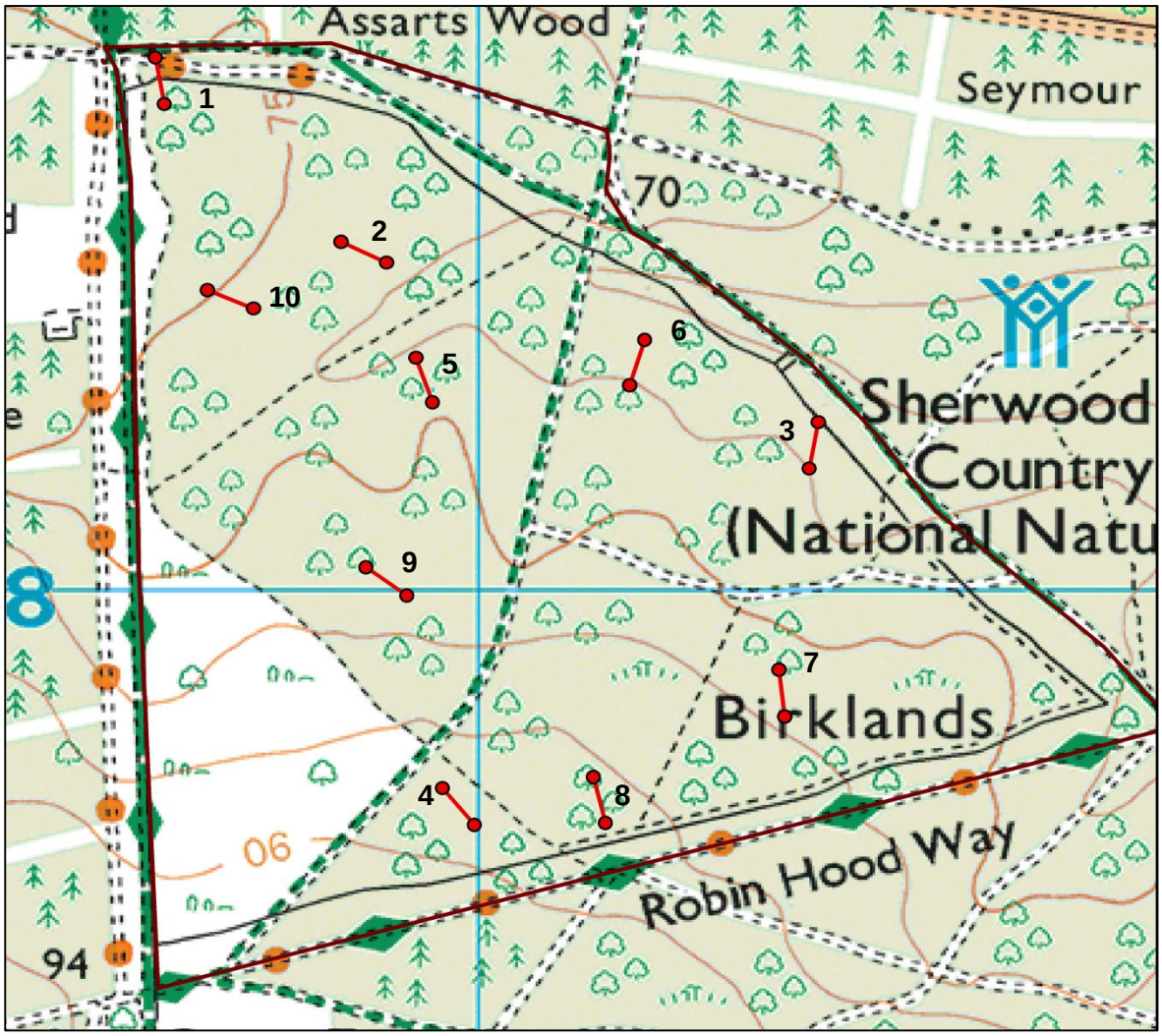


Figure 18: *Left represents total volume of unidentified dead wood for study area 1 within Sherwood Forest NNR.*

Chart 11: *Below shows total volume of unidentified dead wood for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 18****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.40	0.74
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume Average	1.58	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.75	0.57
Total Volume Average	8.98	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.15	1.32

9.2 Study Area 2 Transects and Individual Results



Transect	Easting	Northing
1	460682	368564
1	460691	368515
2	460910	368347
2	460865	368369
3	461336	368178
3	461328	368129
4	460997	367751
4	460965	367790
5	461165	368265
5	461150	368217
6	460939	368246
6	460956	368199
7	461303	367866
7	461297	367916
8	461126	367753
8	461115	367802
9	460890	368024
9	460930	367994
10	460733	368318
10	460779	368298

Figure 19: *Above is study area 2 with the ten randomly assigned transect lines.*

Chart 12: *Left are the British National Grid easting and northing coordinates for the starting and ending points of each transect line shown in* ***Figure 19*** *for study area 2.*

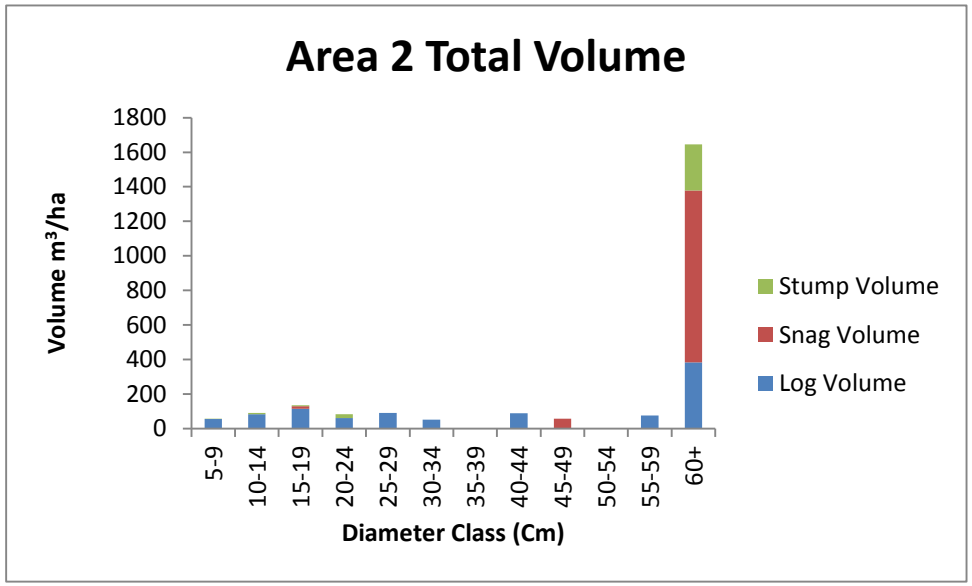


Figure 20: *Above presents the total volume within each Diameter class for area 2 within Sherwood Forest NNR.*

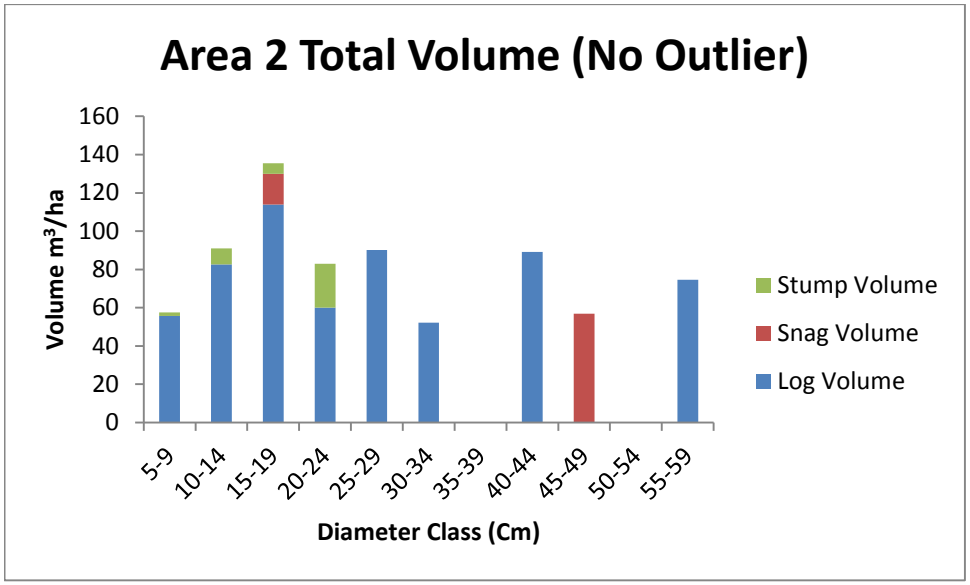


Figure 21: *Above presents the total volume within each Diameter class for area 2 within Sherwood Forest NNR, with the exception of Diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	55.66	82.66	113.97	60.06	90.08	52.14	0.00	89.15	0.00	0.00	74.64	382.94	1001.30	25.03
Snag Volume	0.00	0.00	16.04	0.00	0.00	0.00	0.00	0.00	56.85	0.00	0.00	994.78	1067.67	26.69
Stump Volume	1.78	8.39	5.55	22.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	266.87	305.41	7.64
Area 2 Volume Total	57.44	91.05	135.56	82.88	90.08	52.14	0.00	89.15	56.85	0.00	74.64	1644.60	2374.38	59.36

Chart 13: *Above shows total volume m^3/ha for each individual Diameter class for study area 2 rounded to the second decimal place. The following results produced* ***Figure 20*** *and* ***21****.*

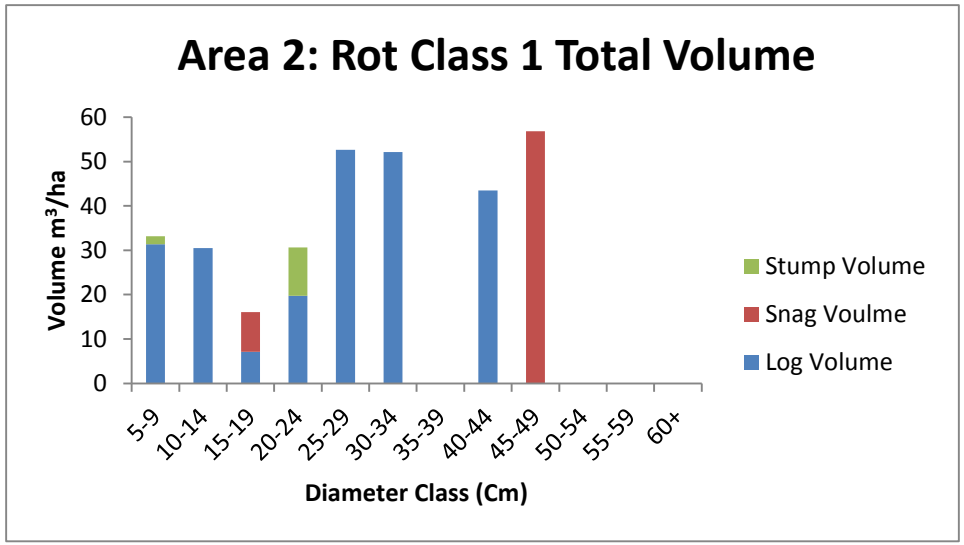


Figure 22: *Left represents total volume of dead wood that fell within rot 1 classification from study area 2 within Sherwood Forest NNR.*

Chart 14: *Below shows total volume of dead wood that fell within rot 1 classification for study area 1 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 22****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	31.39	30.47	7.13	19.74	52.65	52.14	0.00	43.52	0.00	0.00	0.00	0.00	237.04	23.70
Snag Volume	0.00	0.00	8.91	0.00	0.00	0.00	0.00	0.00	56.85	0.00	0.00	0.00	65.76	6.58
Stump Volume	1.78	0.00	0.00	10.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.66	1.27
Total Volume	33.16	30.47	16.04	30.62	52.65	52.14	0.00	43.52	56.85	0.00	0.00	0.00	315.46	31.55

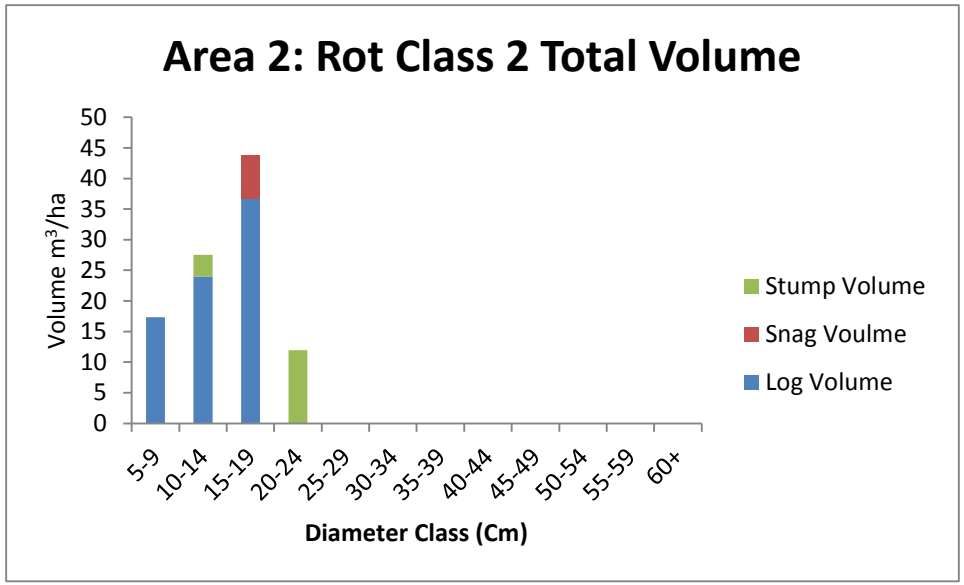


Figure 23: *Left represents total volume of dead wood that fell within rot 2 classification from study area 2 within Sherwood Forest NNR.*

Chart 15: *Below shows total volume of dead wood that fell within rot 2 classification for study area 2 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 23****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	17.32	23.98	36.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.02	7.80
Snag Volume	0.00	0.00	7.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.13	0.71
Stump Volume	0.00	3.55	0.00	11.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.50	1.55
Total Volume	17.32	27.54	43.85	11.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.65	10.06

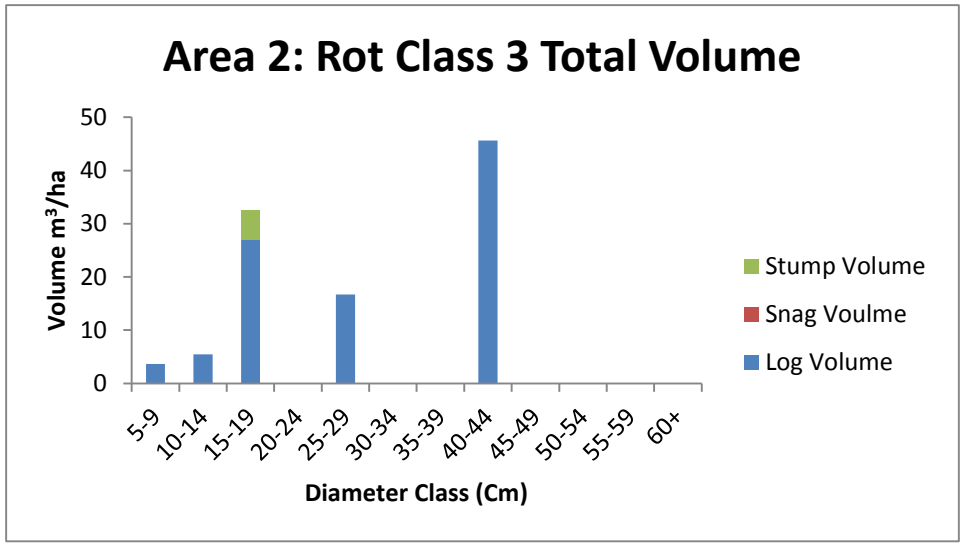


Figure 24: *Left represents total volume of dead wood that fell within rot 3 classification from study area 2 within Sherwood Forest NNR.*

Chart 16: *Below shows total volume of dead wood that fell within rot 3 classification for study area 2 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 24****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	3.65	5.45	26.99	0.00	16.68	0.00	0.00	45.62	0.00	0.00	0.00	0.00	98.40	9.84
Snag Voulme	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume	0.00	0.00	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.55	0.56
Total Volume	3.65	5.45	32.55	0.00	16.68	0.00	0.00	45.62	0.00	0.00	0.00	0.00	103.95	10.40

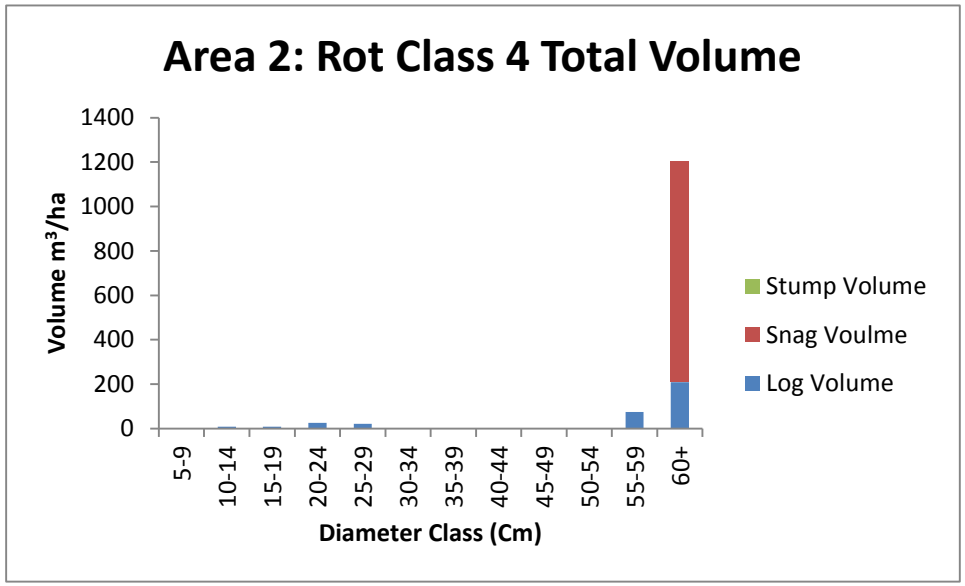


Figure 25: *Above represents total volume of dead wood that fell within rot 4 classification from study area 2 within Sherwood Forest NNR.*

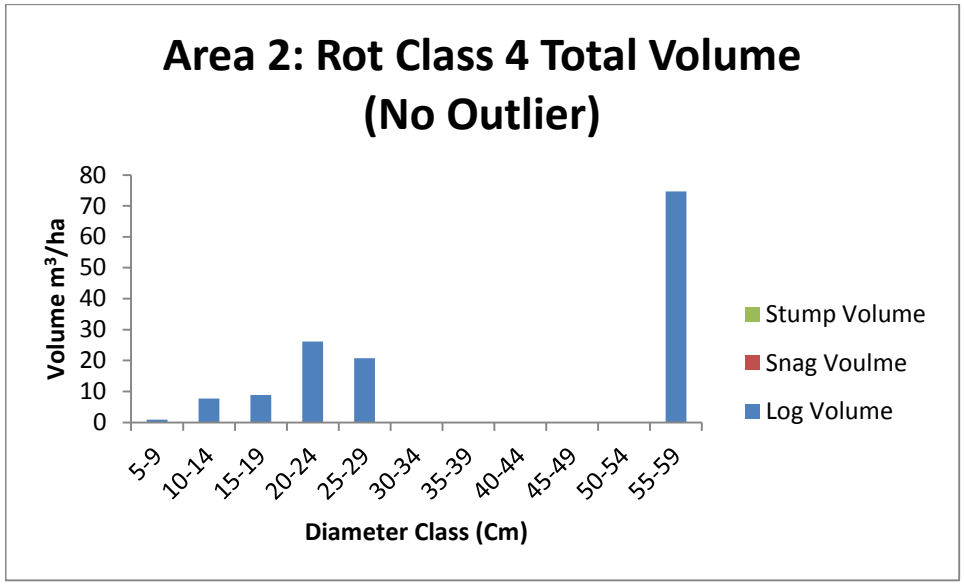


Figure 26: *Above represents total volume of dead wood that fell within rot 4 classification from study area 2 within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	3.65	5.45	26.99	0.00	16.68	0.00	0.00	45.62	0.00	0.00	0.00	0.00	98.40	9.84
Snag Volume	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume	0.00	0.00	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.55	0.56
Total Volume	3.65	5.45	32.55	0.00	16.68	0.00	0.00	45.62	0.00	0.00	0.00	0.00	103.95	10.40

Chart 17: *Above shows total volume of dead wood that fell within rot 4 classification for study area 2 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 25*** *and* ***Figure 26.***

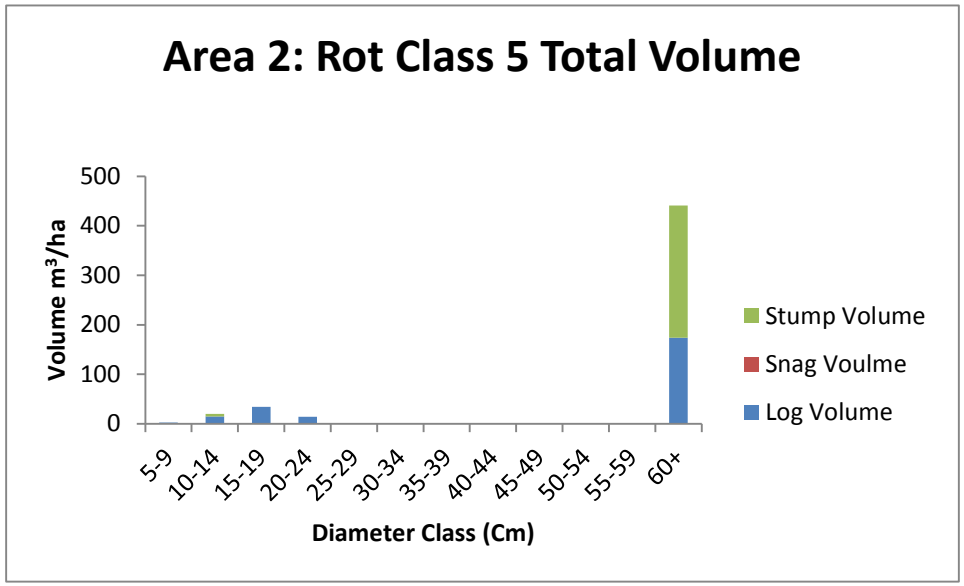


Figure 27: *Above represents total volume of dead wood that fell within rot 5 classification from study area 2 within Sherwood Forest NNR.*

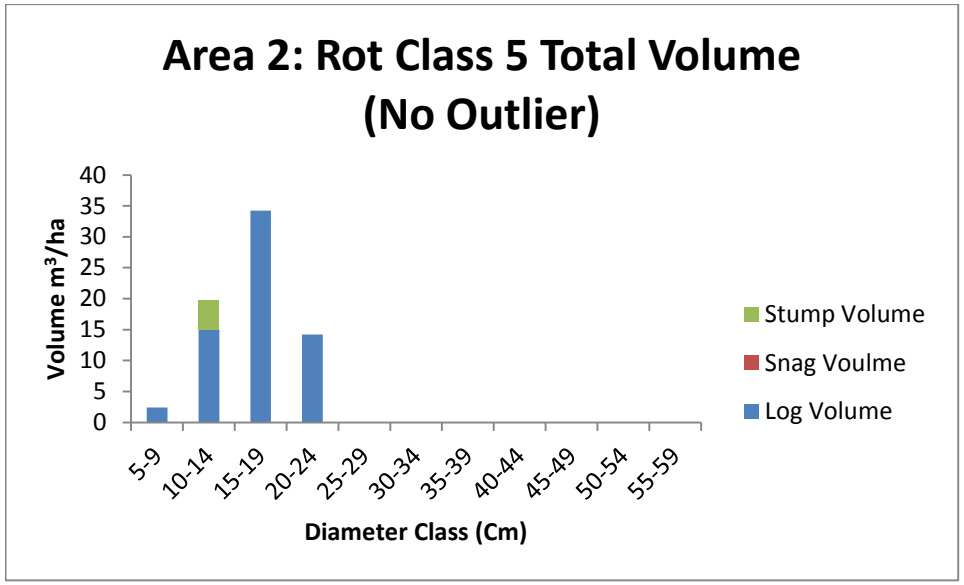


Figure 28: *Above represents total volume of dead wood that fell within rot 5 classification from study area 2 within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	2.42	15.03	34.22	14.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	174.10	239.98	24.00
Snag Volume	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume	0.00	4.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	266.87	271.71	27.17
Total Volume	2.42	19.86	34.22	14.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	440.97	511.69	51.17

Chart 18: *Above shows total volume of dead wood that fell within rot 5 classification for study area 2 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 27*** *and* ***Figure 28****.*

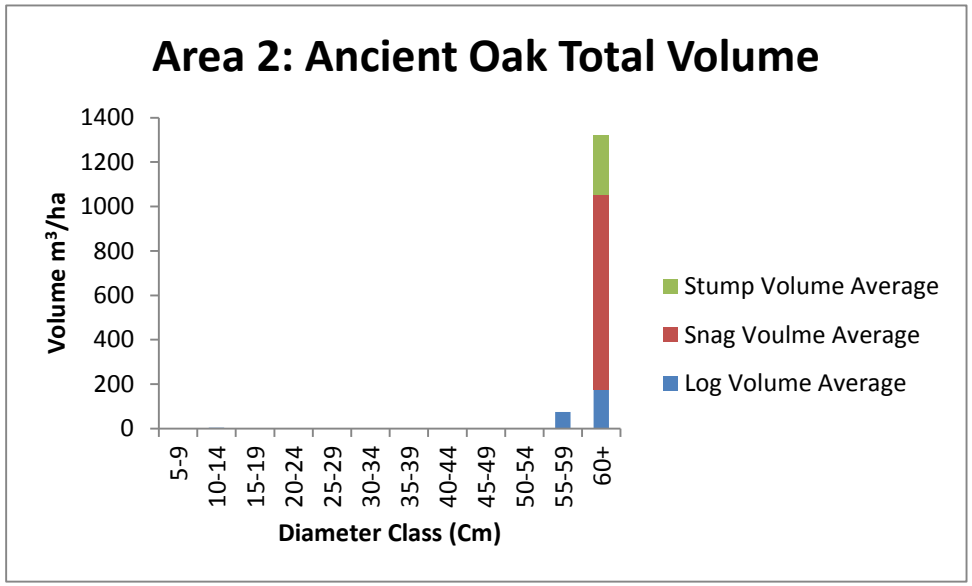


Figure 29: *Above represents total volume of ancient oak dead wood for study area 2 within Sherwood Forest NNR.*

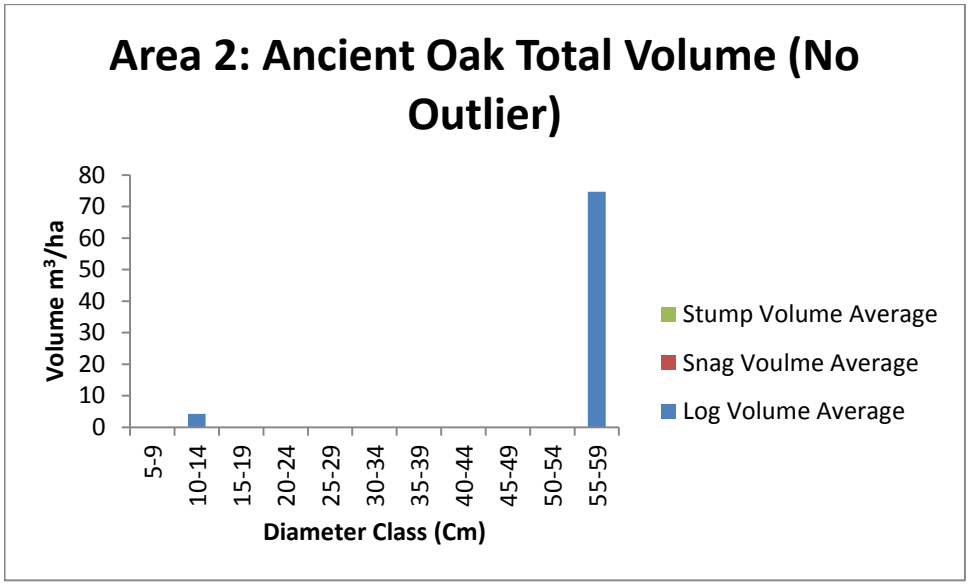


Figure 30: *Above represents total volume of ancient oak dead wood for study area 2 within Sherwood Forest NNR, with the exception of diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	0.00	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.64	174.10	252.91	25.29
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	877.31	877.31	87.73
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	266.87	266.87	26.69
Total Volume Average	0.00	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.64	1318.28	1397.09	139.71

Chart 19: *Above shows total volume of ancient oak dead wood for study area 2 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 29*** *and* ***Figure 30****.*

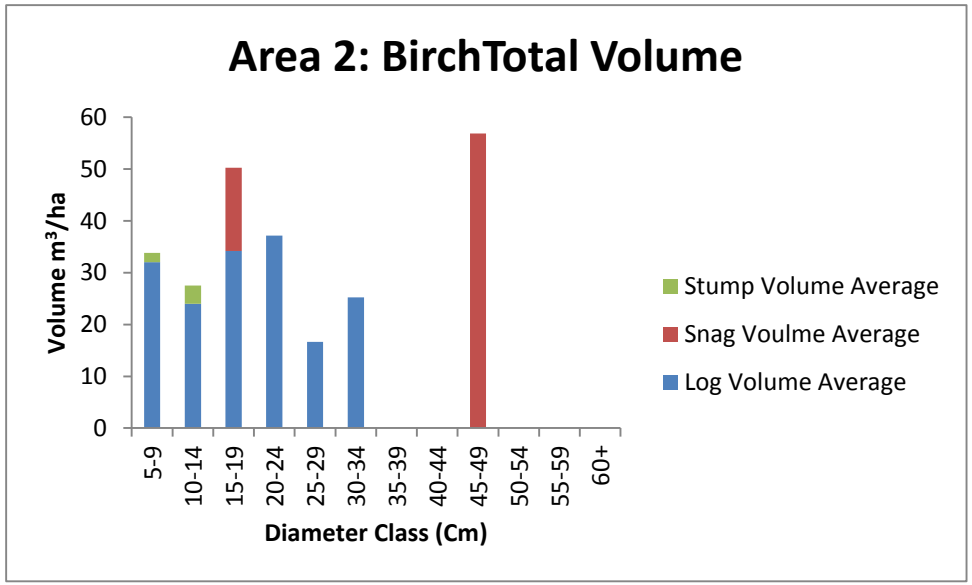


Figure 31: *Left represents total volume of birch dead wood for study area 2 within Sherwood Forest NNR.*

Chart 20: *Below shows total volume of birch dead wood for study area 2 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 31****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	32.03	23.98	34.22	37.13	16.68	25.27	0.00	0.00	0.00	0.00	0.00	0.00	169.31	16.93
Snag Volume Average	0.00	0.00	16.04	0.00	0.00	0.00	0.00	0.00	56.85	0.00	0.00	0.00	72.89	7.29
Stump Volume Average	1.78	3.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.33	0.53
Total Volume Average	33.80	27.54	50.26	37.13	16.68	25.27	0.00	0.00	56.85	0.00	0.00	0.00	247.53	24.75

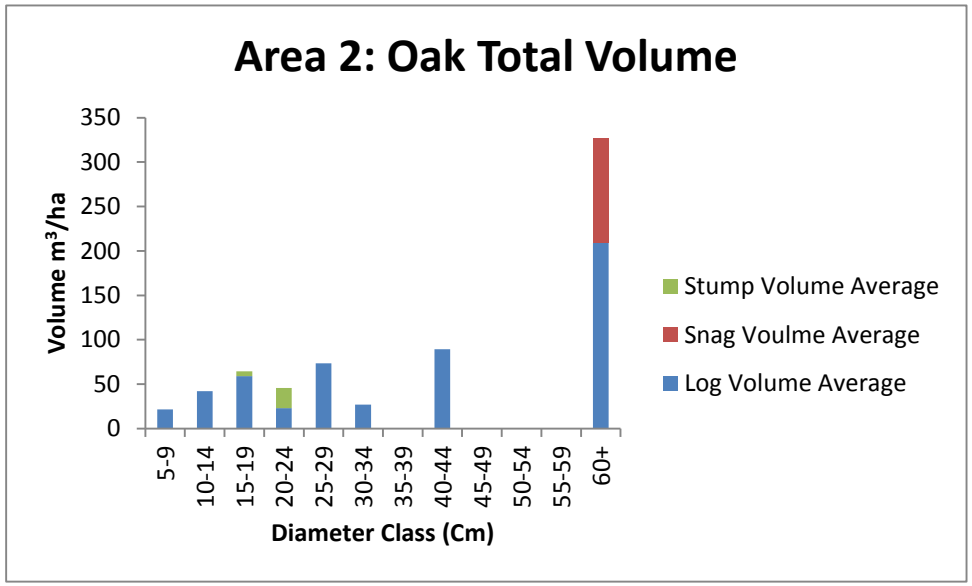


Figure 32: *Above represents total volume of oak dead wood for study area 2 within Sherwood Forest NNR.*

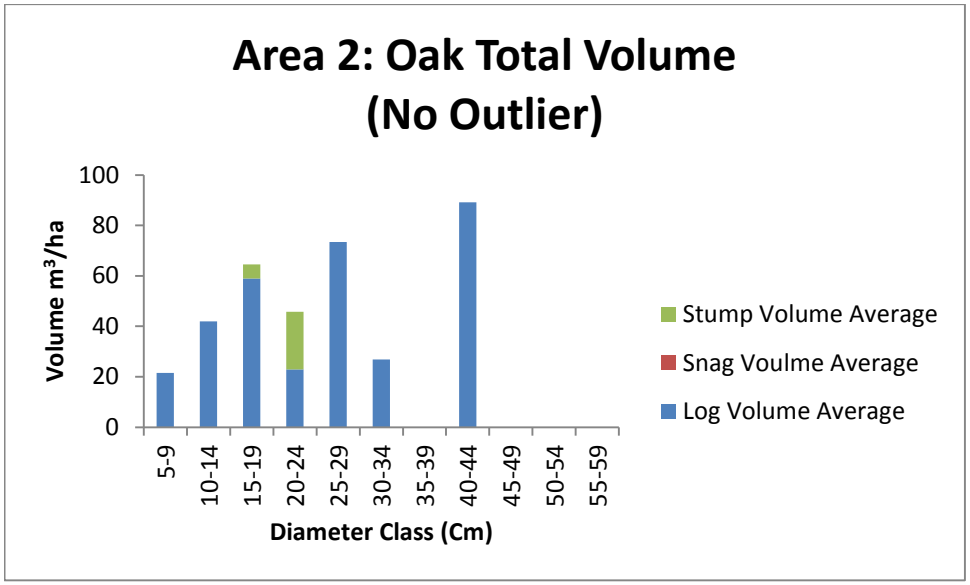


Figure 33: *Above represents total volume of oak dead wood for study area 2 within Sherwood Forest NNR, with the exception of diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	21.54	41.95	58.97	22.92	73.41	26.87	0.00	89.15	0.00	0.00	0.00	208.84	543.64	54.36
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117.47	117.47	11.75
Stump Volume Average	0.00	0.00	5.55	22.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.38	2.84
Total Volume Average	21.54	41.95	64.52	45.75	73.41	26.87	0.00	89.15	0.00	0.00	0.00	326.31	689.49	68.95

Chart 21: *Above shows total volume of oak dead wood for study area 2 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 32*** *and* ***Figure 33****.*

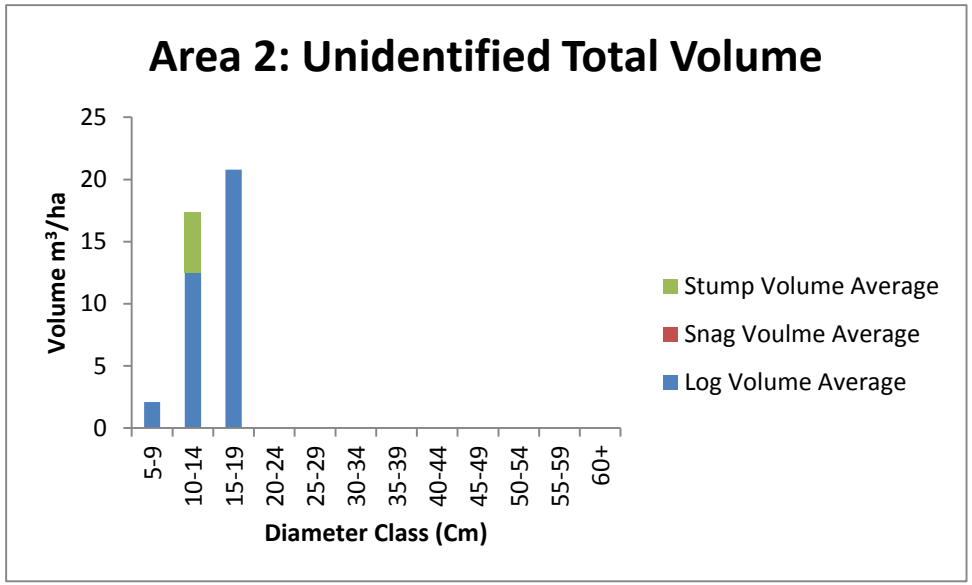
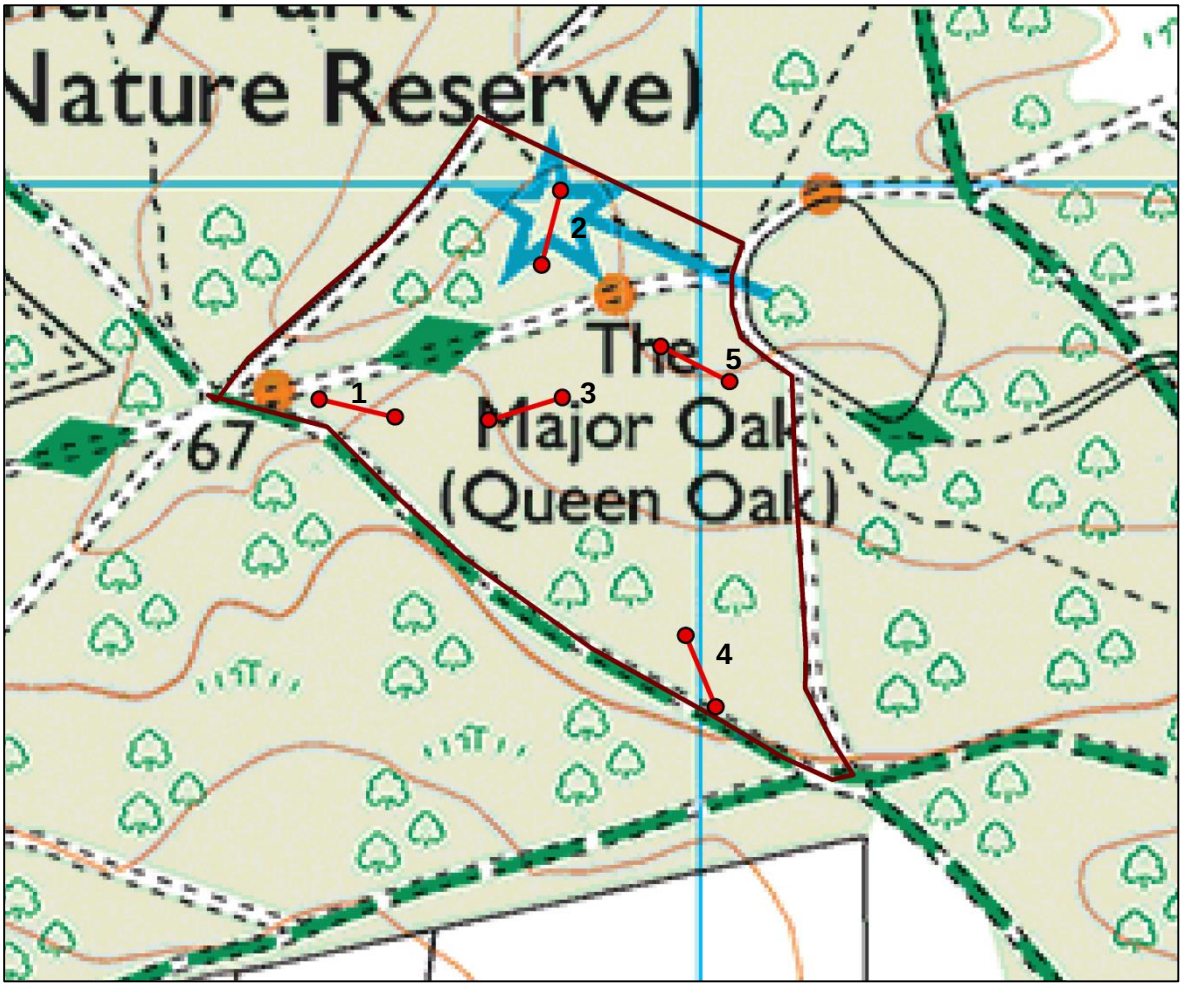


Figure 34: *Left represents total volume of unidentified dead wood for study area 2 within Sherwood Forest NNR, with the exception of diameter class 60+*

Chart 22: *Below shows total volume of unidentified dead wood for study area 2 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 34****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	2.10	12.56	20.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.43	3.54
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume Average	0.00	4.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.84	0.48
Total Volume Average	2.10	17.40	20.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.27	4.03

9.3 Study Area 3a Transects

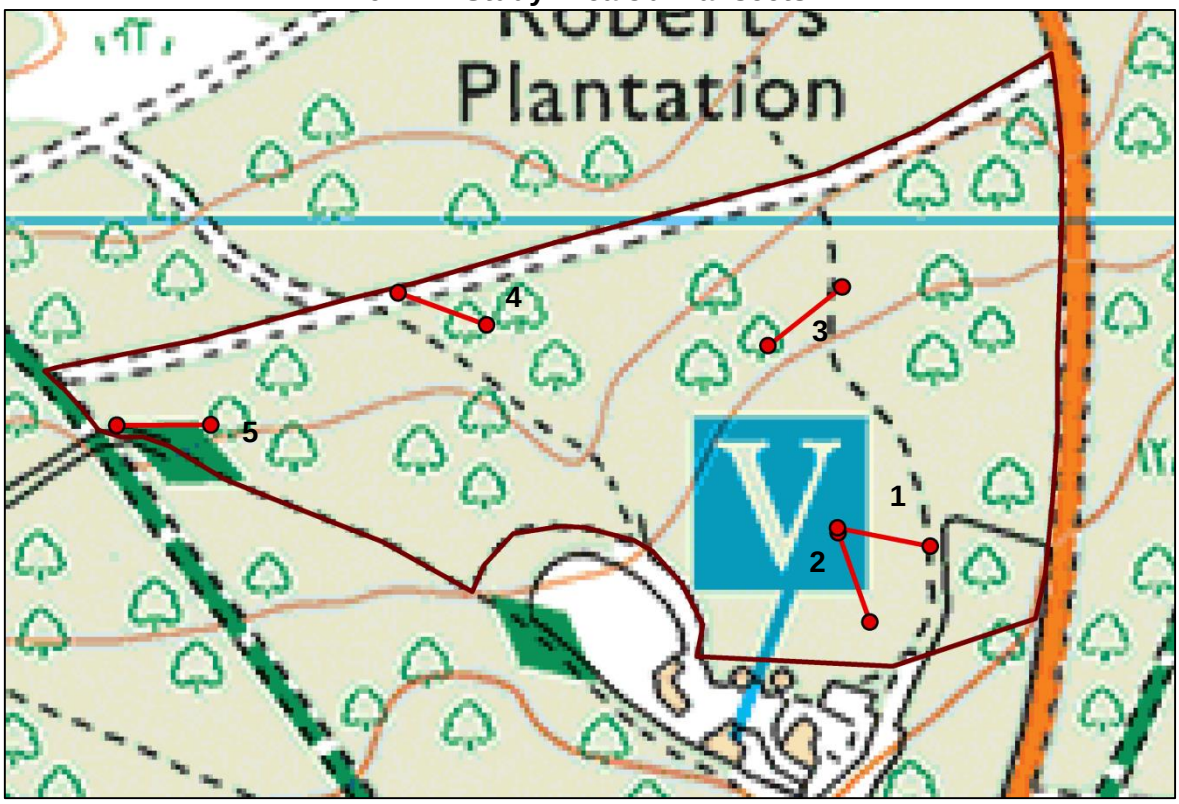


Transect	Easting	Northing
1	461755	367861
1	461804	367849
2	461911	367996
2	461898	367948
3	461912	367862
3	461864	367847
4	462011	367662
4	461991	367708
5	462020	367872
5	461976	367895

Figure 35: *Above is study area 3a with the ten randomly assigned transect lines.*

Chart 23: *Above are the British National Grid easting and northing coordinates for the starting and ending points of each transect line shown in* ***Figure 35*** *for study area 3a.*

9.4 Study Area 3b Transects



Transect	Easting	Northing
1	462730	367828
1	462681	367838
2	462698	367788
2	462681	367835
3	462683	367965
3	462644	367934
4	462448	367962
4	462495	367945
5	462299	367892
5	462349	367892

Figure 36: *Above is study area 3b with the ten randomly assigned transect lines.*

Chart 24: *Above are the British National Grid easting and northing coordinates for the starting and ending points of each transect line shown in* ***Figure 36*** *for study area 3b.*

9.5 Study Area 3a and 3b Individual Results

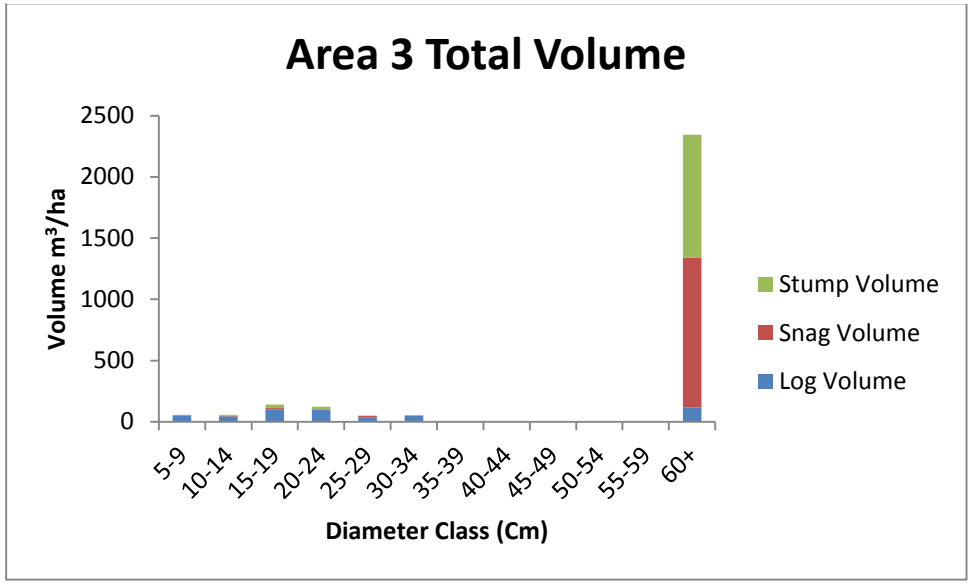


Figure 37: *Above presents the total volume within each Diameter class for area 3a and 3b within Sherwood Forest NNR.*

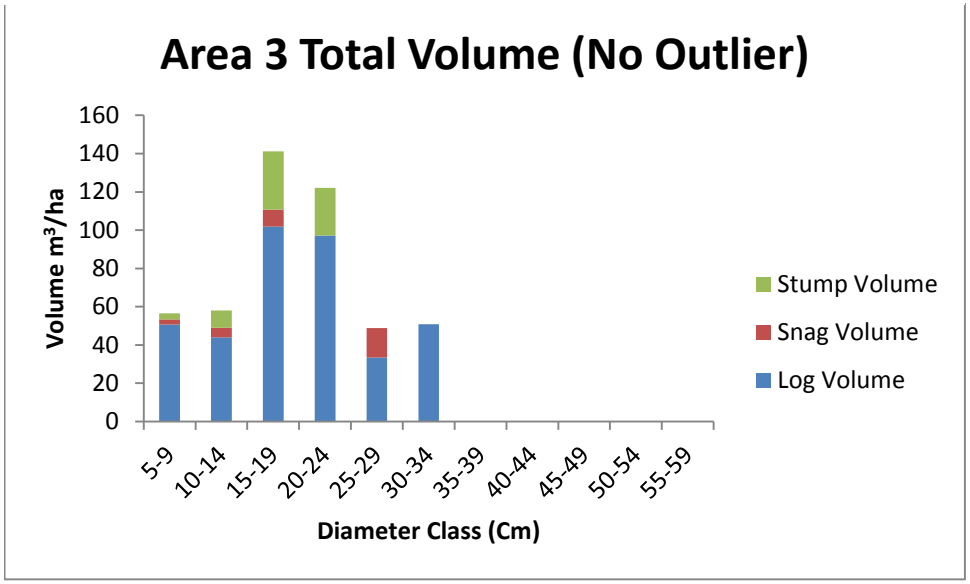


Figure 38: *Above presents the total volume within each Diameter class for area 3a and 3b within Sherwood Forest NNR, with the exception of Diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	50.61	43.99	101.85	97.14	33.36	50.73	0.00	0.00	0.00	0.00	0.00	117.47	495.16	12.38
Snag Volume	2.79	4.93	8.91	0.00	15.42	0.00	0.00	0.00	0.00	0.00	0.00	1222.97	1255.02	31.38
Stump Volume	3.16	9.01	30.45	24.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1004.60	1072.21	26.81
Area 3 Volume Total	56.55	57.93	141.21	122.14	48.78	50.73	0.00	0.00	0.00	0.00	0.00	2345.04	2822.39	70.56

Chart 25: *Above shows total volume m^3/ha for each individual Diameter class for study area 3a and 3b rounded to the second decimal place. The following results produced* ***Figure 37*** *and* ***38****.*

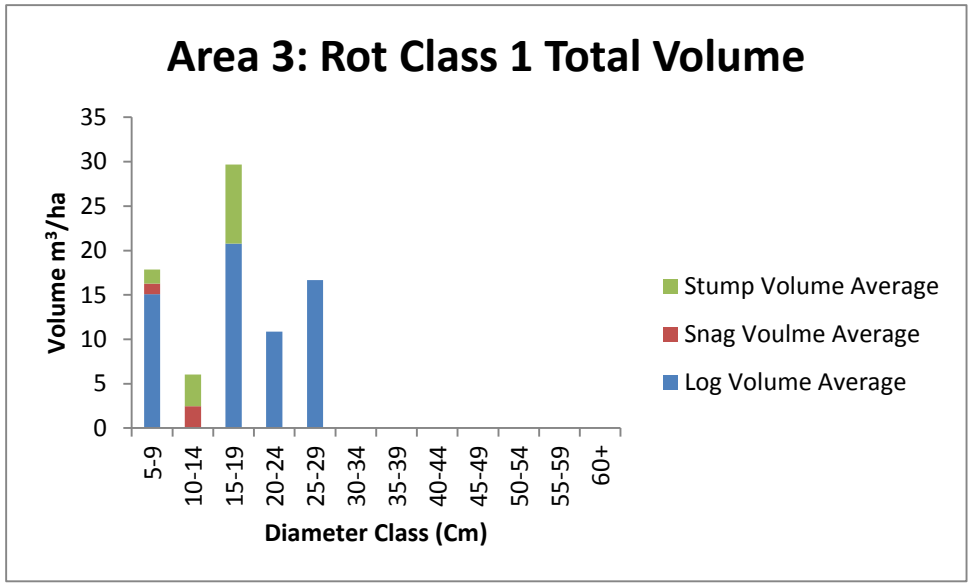


Figure 39: *Above represents total volume of dead wood that fell within rot 1 classification from study area 3a and 3b within Sherwood Forest NNR.*

Chart 26: *Below shows total volume of dead wood that fell within rot 1 classification for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 39****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	15.08	0.00	20.78	10.88	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.41	6.34
Snag Volume Average	1.21	2.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.37
Stump Volume Average	1.58	3.55	8.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.04	1.40
Total Volume Average	17.86	6.02	29.68	10.88	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.13	8.11

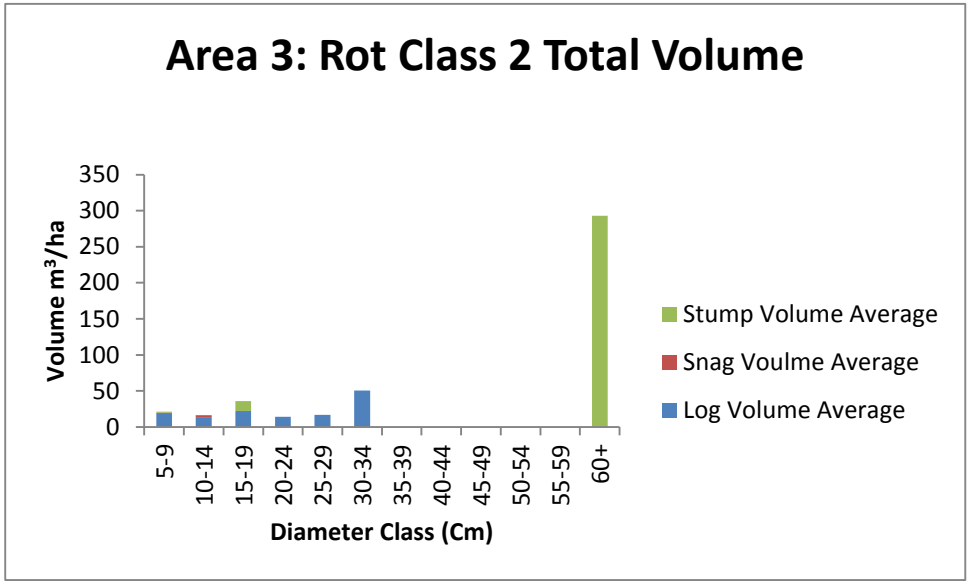


Figure 40: *Above represents total volume of dead wood that fell within rot 2 classification from study area 3a and 3b within Sherwood Forest NNR, with the exception of Diameter class 60+.*

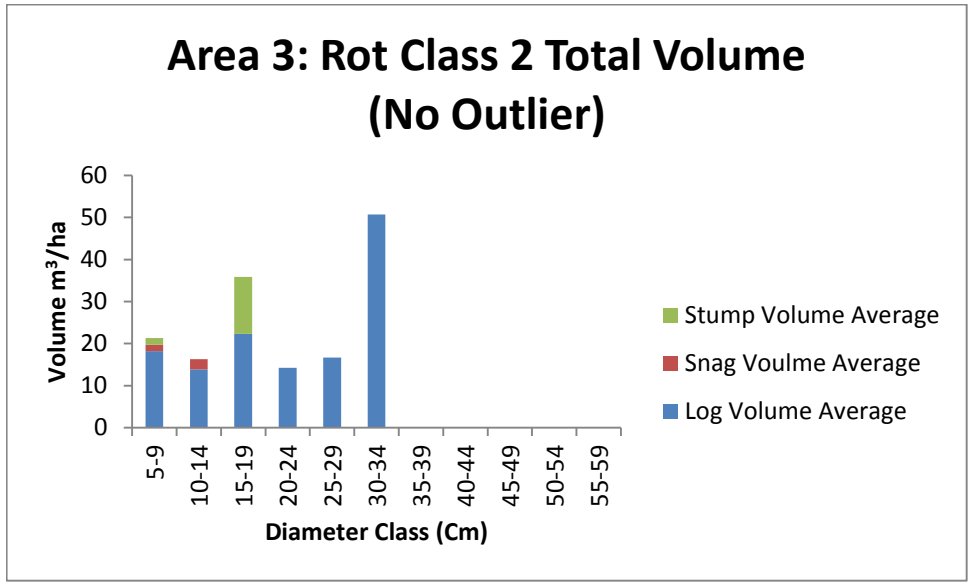


Figure 41: *Above represents total volume of dead wood that fell within rot 2 classification from study area 3a and 3b within Sherwood Forest NNR.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	18.16	13.84	22.31	14.21	16.68	50.73	0.00	0.00	0.00	0.00	0.00	0.00	135.93	13.59
Snag Volume Average	1.58	2.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.05	0.40
Stump Volume Average	1.58	0.00	13.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	293.15	308.28	30.83
Total Volume Average	21.32	16.31	35.85	14.21	16.68	50.73	0.00	0.00	0.00	0.00	0.00	293.15	448.25	44.83

Chart 27: *Above shows total volume of dead wood that fell within rot 2 classification for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 40*** *and* ***Figure 41****.*

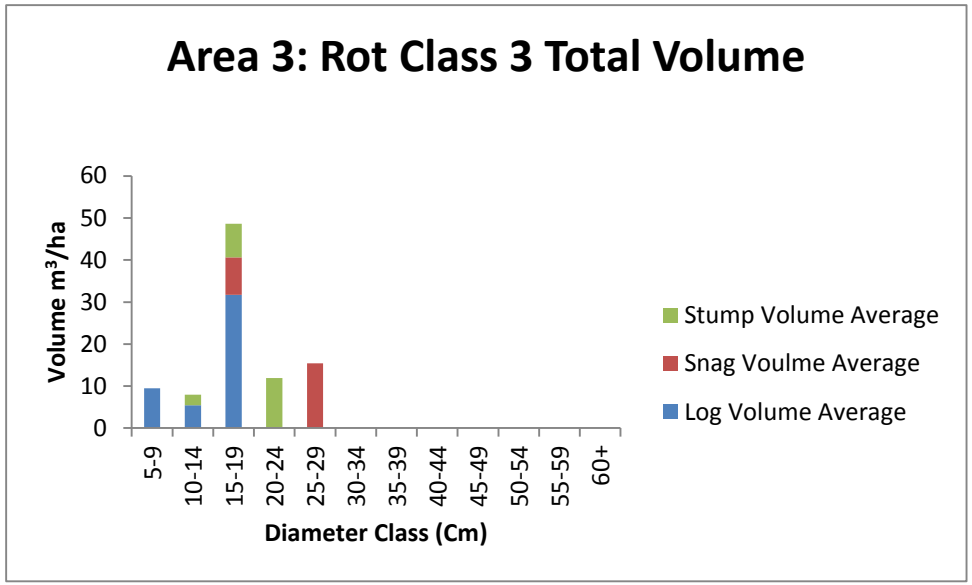


Figure 42: *Above represents total volume of dead wood that fell within rot 3 classification from study area 3a and 3b within Sherwood Forest NNR.*

Chart 28: *Below shows total volume of dead wood that fell within rot 3 classification for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 42****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	9.47	5.45	31.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.61	4.66
Snag Volume Average	0.00	0.00	8.91	0.00	15.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.33	2.43
Stump Volume Average	0.00	2.47	7.99	11.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.40	2.24
Total Volume Average	9.47	7.92	48.58	11.94	15.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	93.34	9.33

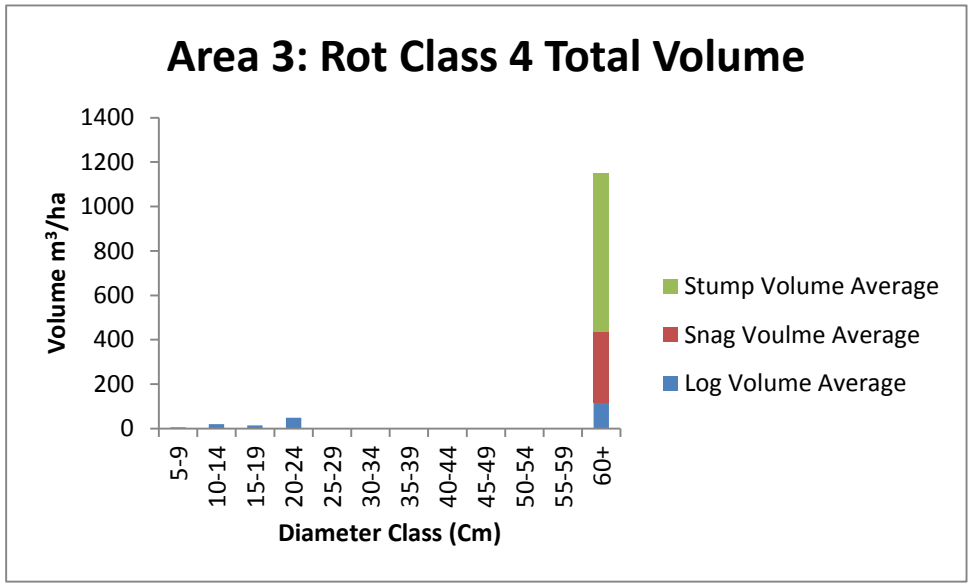


Figure 43: *Above represents total volume of dead wood that fell within rot 4 classification from study area 3a and 3b within Sherwood Forest NNR.*

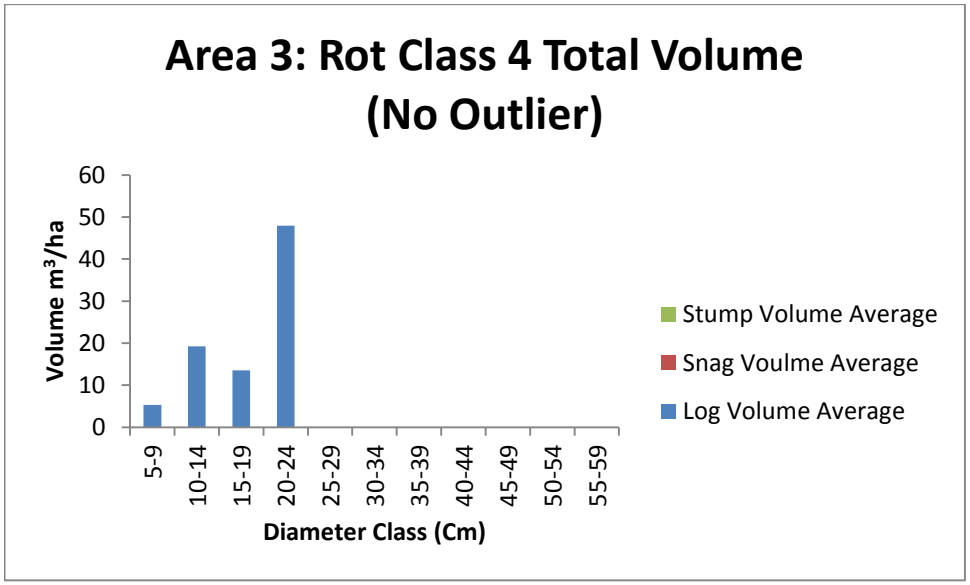


Figure 44: *Above represents total volume of dead wood that fell within rot 4 classification from study area 3a and 3b within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	5.28	19.25	13.55	47.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117.47	203.51	20.35
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	320.66	320.66	32.07
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	711.45	711.45	71.15
Total Volume Average	5.28	19.25	13.55	47.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1149.59	1235.63	123.56

Chart 29: *Above shows total volume of dead wood that fell within rot 4 classification for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 43*** *and* ***Figure 44****.*

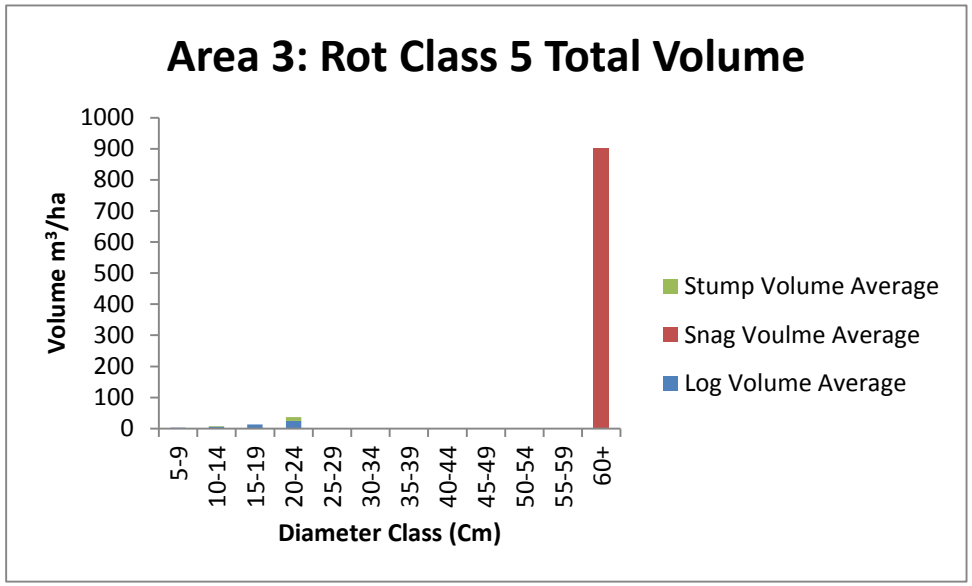


Figure 45: *Above represents total volume of dead wood that fell within rot 5 classification from study area 3a and 3b within Sherwood Forest NNR.*

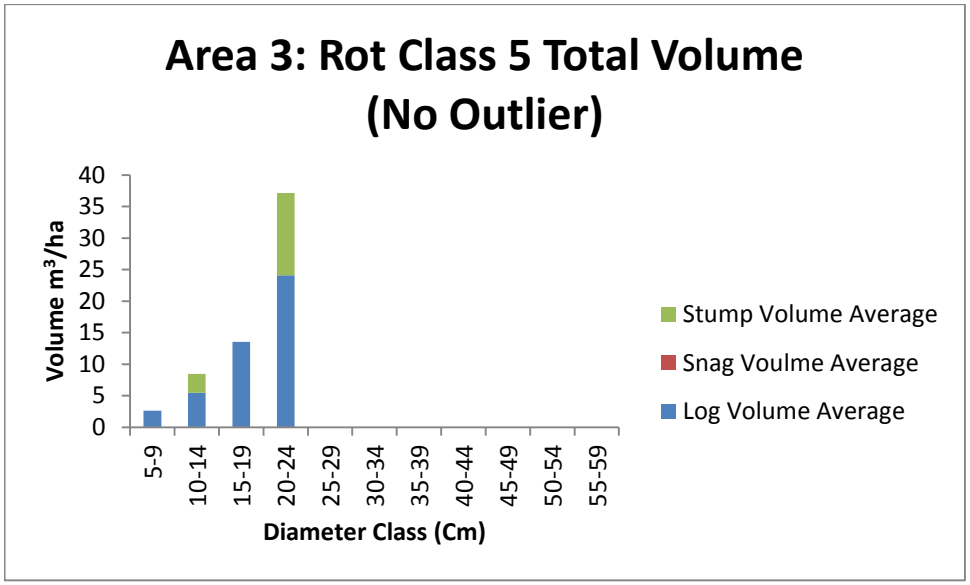


Figure 46: *Above represents total volume of dead wood that fell within rot 5 classification from study area 3a and 3b within Sherwood Forest NNR, with the exception of Diameter class 60+.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	2.62	5.45	13.55	24.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.70	4.57
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	902.30	902.30	90.23
Stump Volume Average	0.00	2.99	0.00	13.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.04	1.60
Total Volume Average	2.62	8.44	13.55	37.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	902.30	964.04	96.40

Chart 30: *Left shows total volume of dead wood that fell within rot 5 classification for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 45*** *and* ***Figure 46****.*

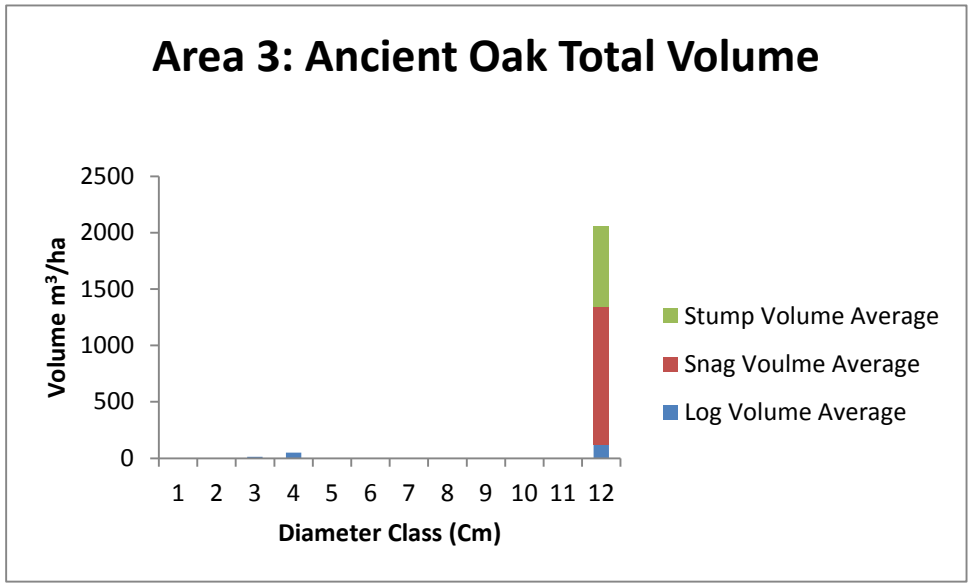


Figure 47: *Above represents total volume of ancient oak dead wood for study area 3a and 3b within Sherwood Forest NNR.*

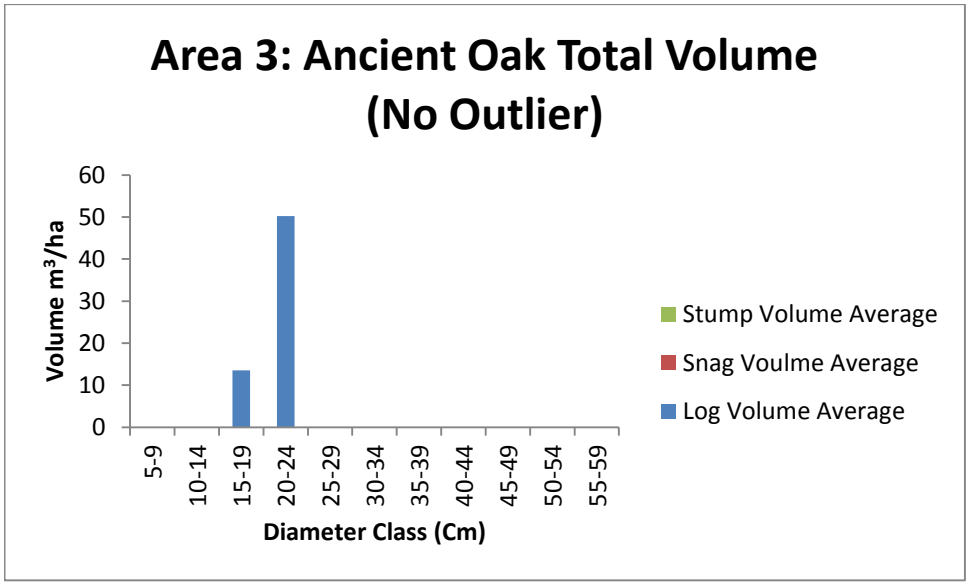


Figure 48: *Above represents total volume of ancient oak dead wood for study area 3a and 3b within Sherwood Forest NNR, with the exception of diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	0.00	0.00	13.55	50.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	117.47	181.26	18.13
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1222.97	1222.97	122.30
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	711.45	711.45	71.15
Total Volume Average	0.00	0.00	13.55	50.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2051.89	2115.67	211.57

Chart 31: *Above shows total volume of ancient oak dead wood for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 47*** *and* ***Figure 48****.*

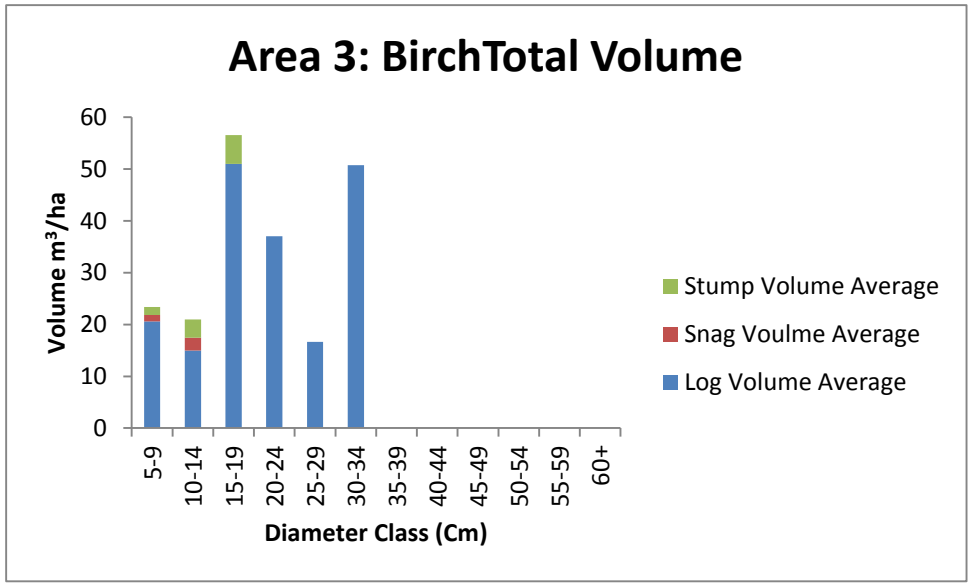


Figure 49: *Left represents total volume of birch dead wood for study area 3a and 3b within Sherwood Forest NNR.*

Chart 32: *Below shows total volume of birch dead wood for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 49****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	20.63	14.98	51.03	37.04	16.68	50.73	0.00	0.00	0.00	0.00	0.00	0.00	191.08	19.11
Snag Volume Average	1.21	2.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.68	0.37
Stump Volume Average	1.58	3.55	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.68	1.07
Total Volume Average	23.42	21.00	56.58	37.04	16.68	50.73	0.00	0.00	0.00	0.00	0.00	0.00	205.44	20.54

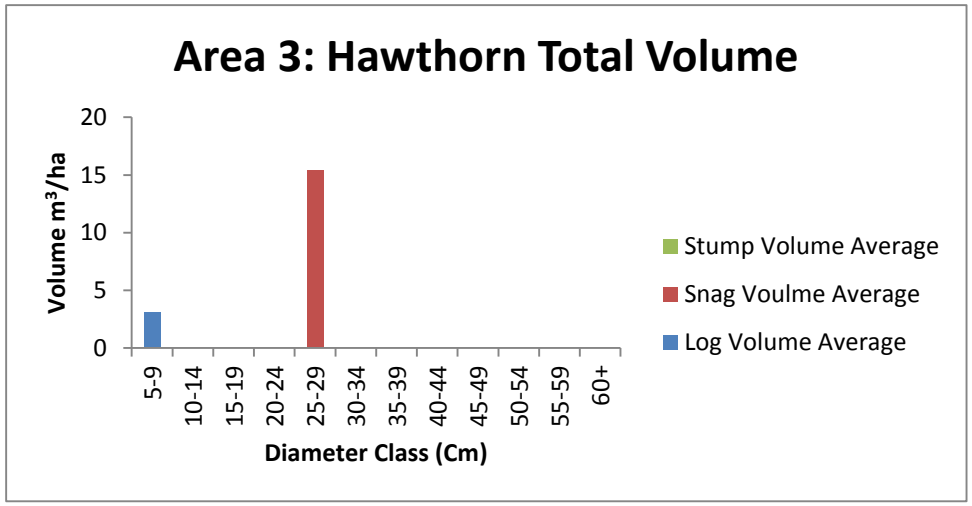


Figure 50**:** *Left represents total volume of hawthorn dead wood for study area 3a and 3b within Sherwood Forest NNR.*

Chart 33: *Below shows total volume of hawthorn dead wood for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 50****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.08	0.31
Snag Volume Average	0.00	0.00	0.00	0.00	15.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.42	1.54
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Volume Average	3.08	0.00	0.00	0.00	15.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.51	1.85

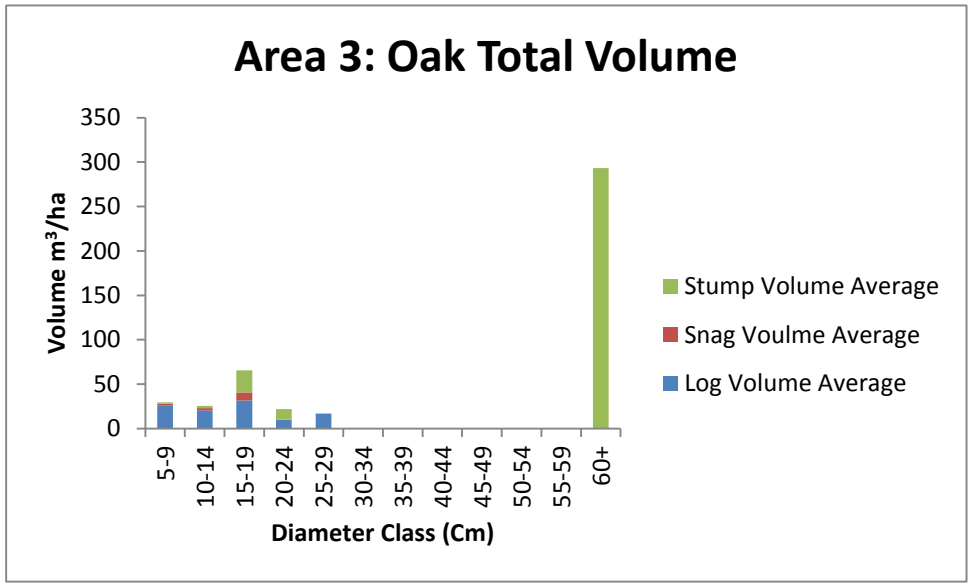


Figure 51: *Above represents total volume of oak dead wood for study area 3a and 3b within Sherwood Forest NNR.*

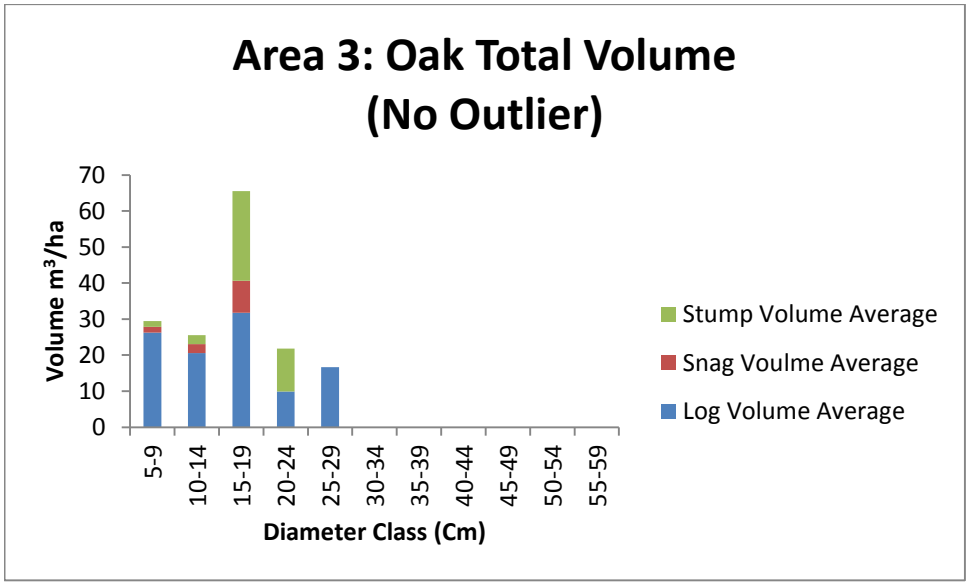


Figure 52: *Above represents total volume of oak dead wood for study area 3a and 3b within Sherwood Forest NNR, with the exception of diameter class 60+*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	26.28	20.58	31.73	9.87	16.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	105.14	10.51
Snag Volume Average	1.58	2.47	8.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.95	1.30
Stump Volume Average	1.58	2.47	24.90	11.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	293.15	334.04	33.40
Total Volume Average	29.44	25.51	65.53	21.81	16.68	0.00	0.00	0.00	0.00	0.00	0.00	293.15	452.13	45.21

Chart 34: *Above shows total volume of oak dead wood for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 51*** *and* ***Figure 52****.*

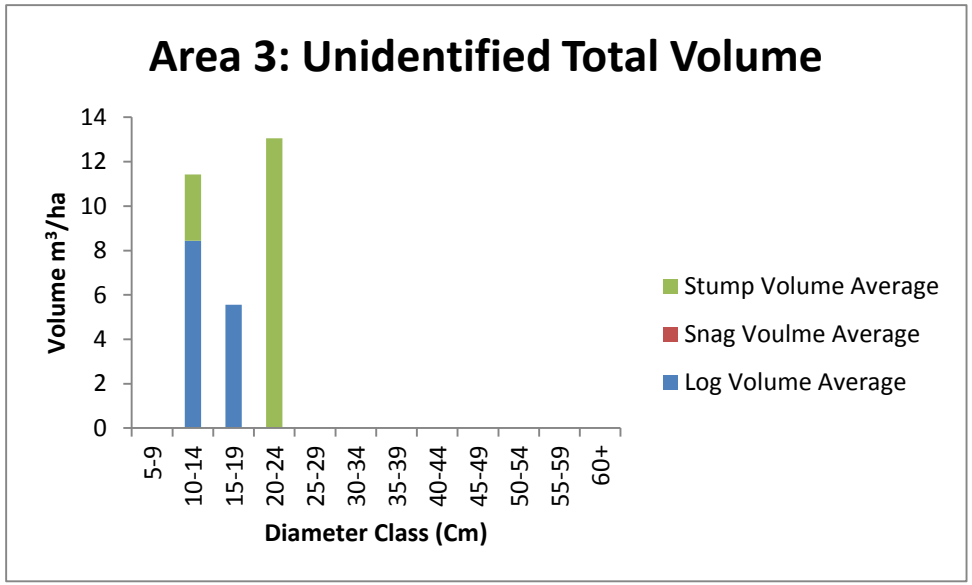


Figure 53: *Left represents total volume of unidentified dead wood for study area 3a and 3b within Sherwood Forest NNR.*

Chart 35: *Below shows total volume of unidentified dead wood for study area 3a and 3b in m^3/ha for each individual Diameter class. The following results produced* ***Figure 53****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	0.00	8.44	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.99	1.40
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume Average	0.00	2.99	0.00	13.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.04	1.60
Total Volume Average	0.00	11.42	5.55	13.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.03	3.00

9.6 Study Area 4 Transects and Individual Results

Transect	Easting	Northing
1	462131	367613
1	462169	367581
2	462215	367555
2	462265	367562
3	462247	367466
3	462288	367494
4	462579	367614
4	462541	367581
5	462526	367523
5	462575	367511
6	462388	367346
6	462417	367386
7	462484	367507
7	462450	367471
8	462344	367486
8	462337	367535
9	462332	367567
9	462371	367535
10	462390	367488
10	462419	367447

Figure 54: *Above is study area 4 with the ten randomly assigned transect lines.*

Chart 36: *Left are the British National Grid easting and northing coordinates for the starting and ending points of each transect line shown in* ***Figure 54*** *for study area 4..*

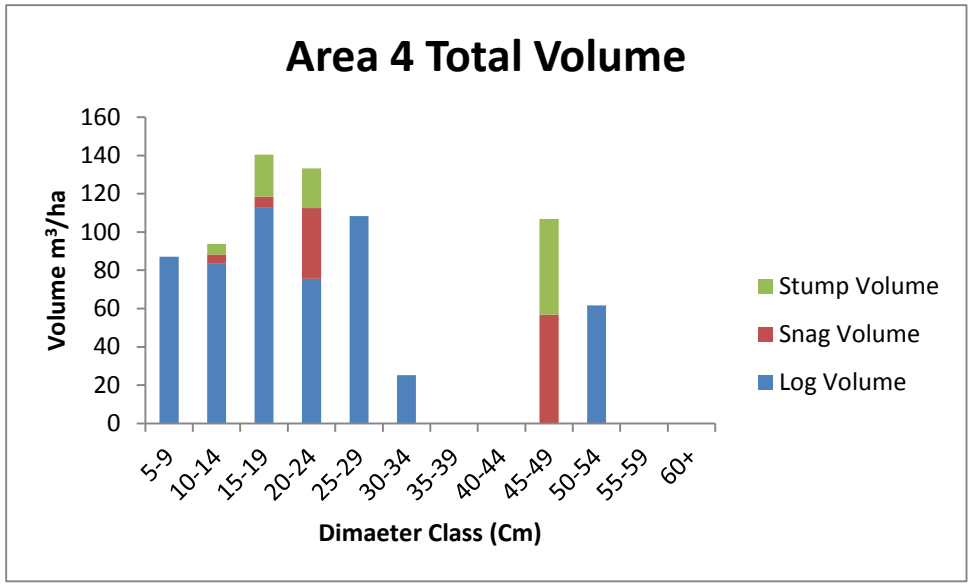


Figure 55: *Left presents the total volume within each Diameter class for area 4 within Sherwood Forest NNR, with the exception of Diameter class 60+*

Chart 37: *Below shows total volume m^3/ha for each individual Diameter class for study area 4 rounded to the second decimal place. The following results produced* ***Figure 55****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume	87.10	83.40	113.06	75.50	108.37	25.27	0.00	0.00	0.00	61.69	0.00	0.00	554.38	55.44
Snag Volume	0.00	4.84	5.55	37.04	0.00	0.00	0.00	0.00	56.85	0.00	0.00	0.00	104.27	10.43
Stump Volume	0.00	5.55	21.81	20.75	0.00	0.00	0.00	0.00	49.96	0.00	0.00	0.00	98.08	9.81
Area 4 Volume Total	87.10	93.79	140.42	133.29	108.37	25.27	0.00	0.00	106.81	61.69	0.00	0.00	756.73	75.67

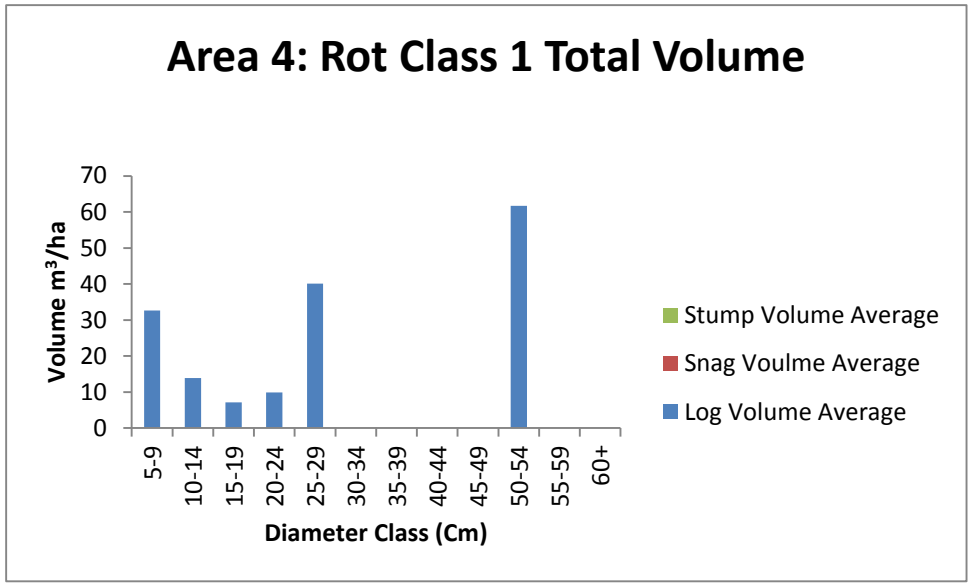


Figure 56: *Left represents total volume of dead wood that fell within rot 1 classification from study area 4 within Sherwood Forest NNR.*

Chart 38: *Below shows total volume of dead wood that fell within rot 1 classification for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 56****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	32.62	13.89	7.13	9.87	40.10	0.00	0.00	0.00	0.00	61.69	0.00	0.00	165.29	16.53
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Volume Average	32.62	13.89	7.13	9.87	40.10	0.00	0.00	0.00	0.00	61.69	0.00	0.00	165.29	16.53

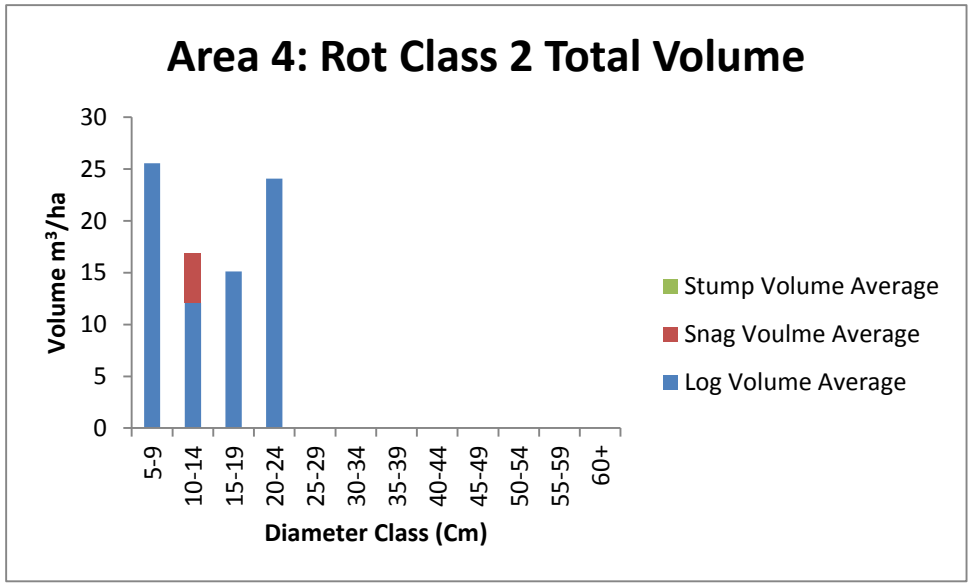


Figure 57: *Left represents total volume of dead wood that fell within rot 2 classification from study area 4 within Sherwood Forest NNR.*

Chart 39: *Below shows total volume of dead wood that fell within rot 2 classification for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 57****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	25.55	12.09	15.13	24.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.85	7.68
Snag Volume Average	0.00	4.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.84	0.48
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Volume Average	25.55	16.93	15.13	24.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.68	8.17

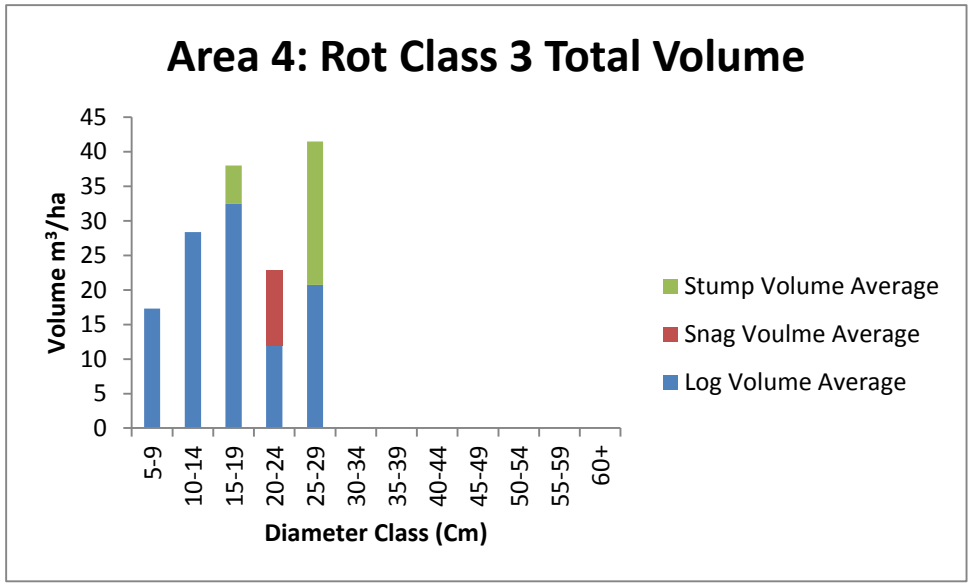


Figure 58: *Left represents total volume of dead wood that fell within rot 3 classification from study area 4 within Sherwood Forest NNR.*

Chart 40: *Below shows total volume of dead wood that fell within rot 3 classification for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 58****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	17.31	28.40	32.45	11.94	20.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.85	11.08
Snag Volume Average	0.00	0.00	0.00	10.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.88	1.09
Stump Volume Average	0.00	0.00	5.55	0.00	20.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.30	2.63
Total Volume Average	17.31	28.40	38.00	22.82	41.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	148.03	14.80

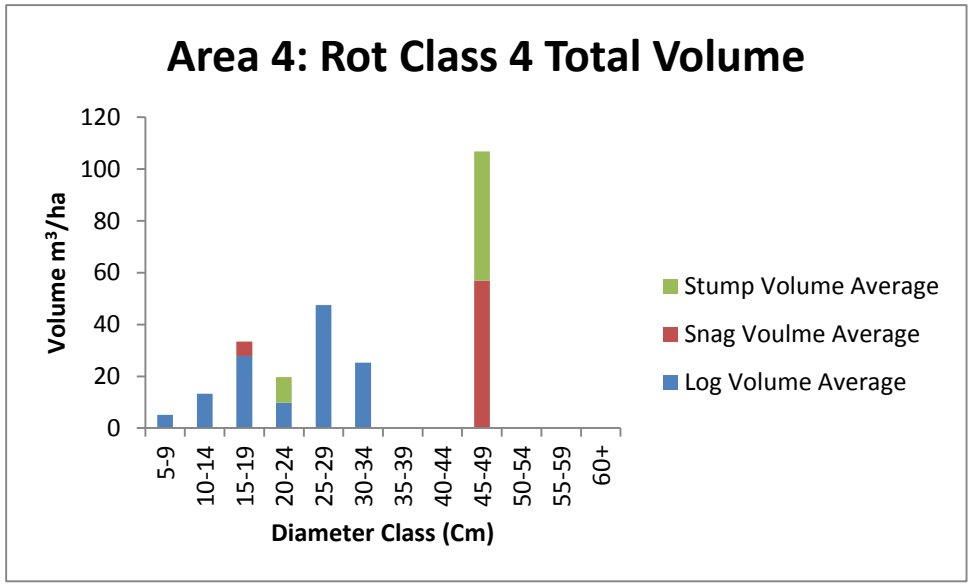


Figure 59: *Left represents total volume of dead wood that fell within rot 4 classification from study area 4 within Sherwood Forest NNR.*

Chart 41: *Below shows total volume of dead wood that fell within rot 4 classification for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 59****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	5.16	13.27	27.91	9.87	47.52	25.27	0.00	0.00	0.00	0.00	0.00	0.00	129.00	12.90
Snag Volume Average	0.00	0.00	5.55	0.00	0.00	0.00	0.00	0.00	56.85	0.00	0.00	0.00	62.40	6.24
Stump Volume Average	0.00	0.00	0.00	9.87	0.00	0.00	0.00	0.00	49.96	0.00	0.00	0.00	59.83	5.98
Total Volume Average	5.16	13.27	33.46	19.74	47.52	25.27	0.00	0.00	106.81	0.00	0.00	0.00	251.23	25.12

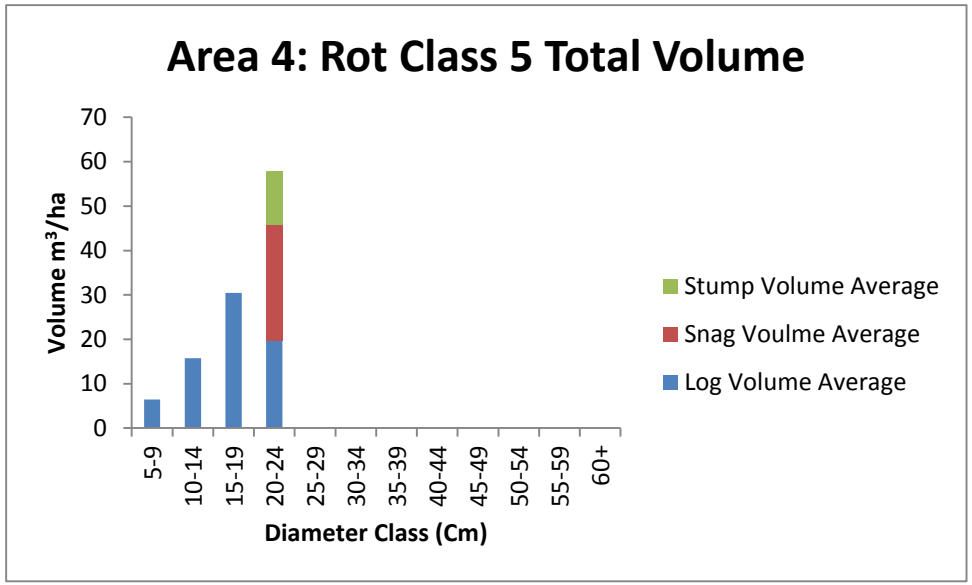


Figure 60: *Left represents total volume of dead wood that fell within rot 5 classification from study area 4 within Sherwood Forest NNR.*

Chart 42: *Below shows total volume of dead wood that fell within rot 5 classification for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 60****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	6.46	15.74	30.45	19.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.39	7.24
Snag Volume Average	0.00	0.00	0.00	26.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.15	2.62
Stump Volume Average	0.00	0.00	0.00	11.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.94	1.19
Total Volume Average	6.46	15.74	30.45	57.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.49	11.05

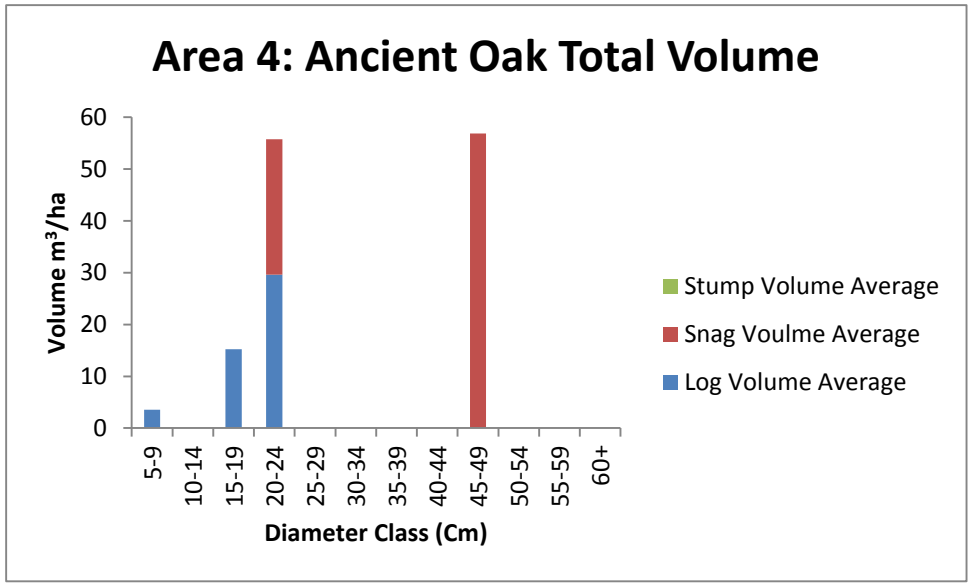


Figure 61: *Left represents total volume of ancient oak dead wood for study area 4 within Sherwood Forest NNR.*

Chart 43: *Below shows total volume of ancient oak dead wood for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 61****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	3.58	0.00	15.22	29.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.41	4.84
Snag Volume Average	0.00	0.00	0.00	26.15	0.00	0.00	0.00	0.00	56.85	0.00	0.00	0.00	83.00	8.30
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Volume Average	3.58	0.00	15.22	55.76	0.00	0.00	0.00	0.00	56.85	0.00	0.00	0.00	131.41	13.14

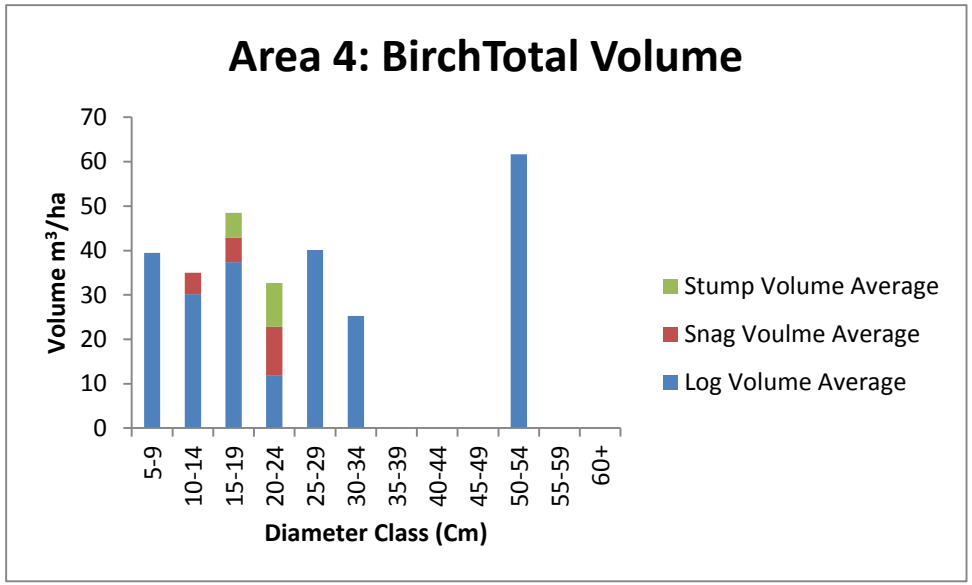


Figure 62: *Left represents total volume of birch dead wood for study area 4 within Sherwood Forest NNR.*

Chart 44: *Below shows total volume of birch dead wood for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 62****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	39.44	30.15	37.38	11.94	40.10	25.27	0.00	0.00	0.00	61.69	0.00	0.00	245.96	24.60
Snag Volume Average	0.00	4.84	5.55	10.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.27	2.13
Stump Volume Average	0.00	0.00	5.55	9.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.42	1.54
Total Volume Average	39.44	34.99	48.48	32.69	40.10	25.27	0.00	0.00	0.00	61.69	0.00	0.00	282.65	28.26

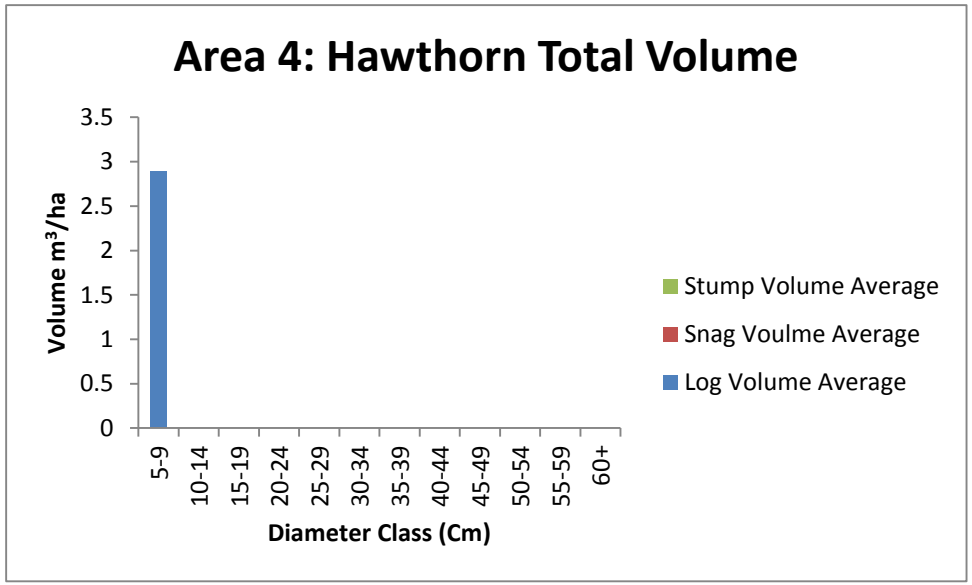


Figure 63: *Left represents total volume of hawthorn dead wood for study area 3a and 3b within Sherwood Forest NNR.*

Chart 45: *Below shows total volume of hawthorn dead wood for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 63****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	2.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.89	0.29
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Volume Average	2.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.89	0.29

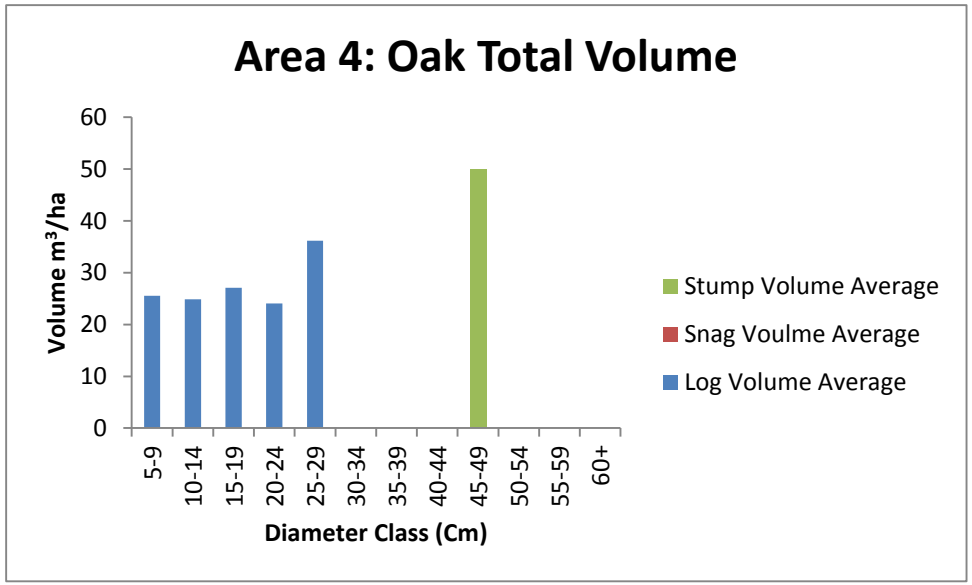


Figure 64: *Left represents total volume of oak dead wood for study area 3a and 3b within Sherwood Forest NNR.*

Chart 46: *Below shows total volume of oak dead wood for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 64****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	25.56	24.90	27.09	24.08	36.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137.80	13.78
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.96	0.00	0.00	0.00	49.96	5.00
Total Volume Average	25.56	24.90	27.09	24.08	36.17	0.00	0.00	0.00	49.96	0.00	0.00	0.00	187.77	18.78

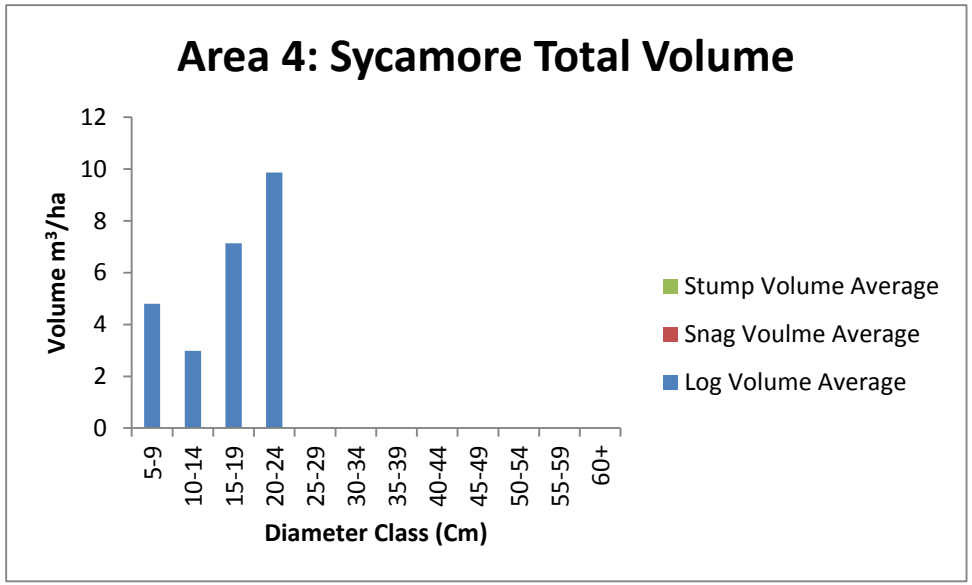


Figure 65: *Left represents total volume of Sycamore dead wood for study area 3a and 3b within Sherwood Forest NNR.*

Chart 47: *Below shows total volume of sycamore dead wood for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 65****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	4.81	2.99	7.13	9.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.79	2.48
Snag Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Volume Average	4.81	2.99	7.13	9.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.79	2.48

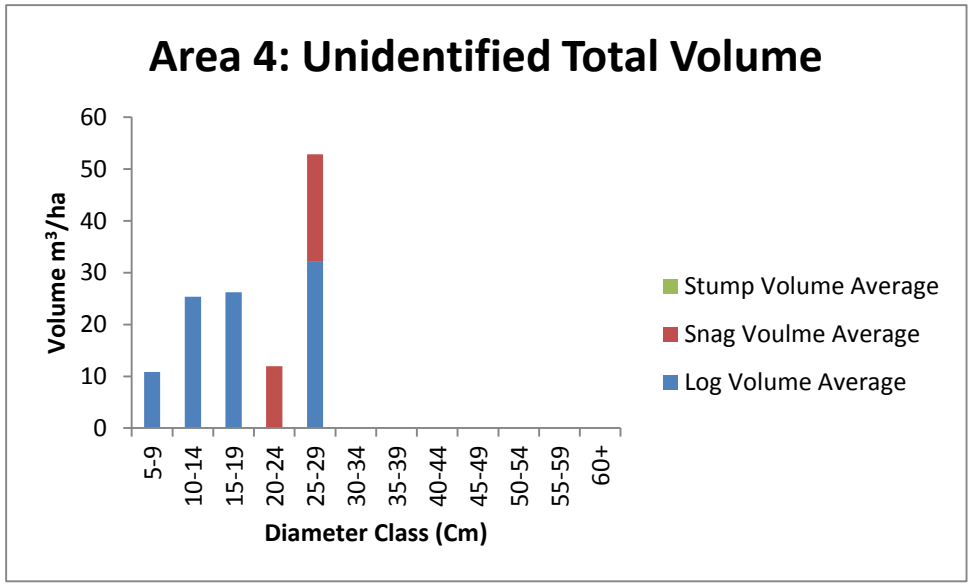


Figure 66**:** *Left represents total volume of unidentified dead wood for study area 3a and 3b within Sherwood Forest NNR.*

Chart 48: *Below shows total volume of unidentified dead wood for study area 4 in m^3/ha for each individual Diameter class. The following results produced* ***Figure 66****.*

Diameter Class (Cm)	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Totals	Average
Log Volume Average	10.83	25.36	26.23	0.00	32.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.53	9.45
Snag Volume Average	0.00	0.00	0.00	11.94	20.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.69	3.27
Stump Volume Average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Volume Average	10.83	25.36	26.23	11.94	52.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	127.22	12.72

9.7 Ancient Oak Haloing Survey

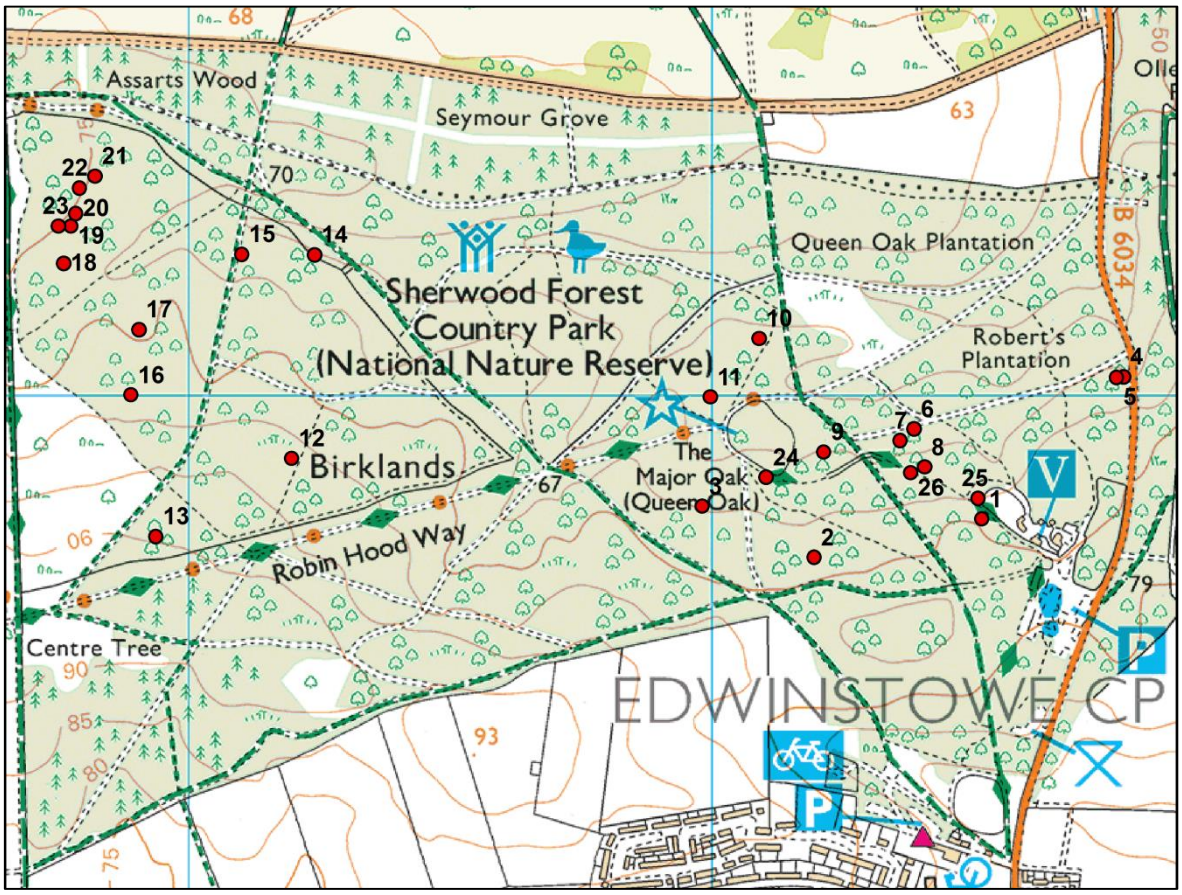


Figure 67: *Above are the 26 ancient oaks surveyed for the halo assessment within Sherwood Forest NNR.*

Map ID	Easting	Northing	2010 #
1	462517	367764	74
2	462196	367691	195
3	461982	367788	880
4	462787	368036	329
5	462774	368035	330
6	462387	367936	271
7	462361	367914	244
8	462407	367863	250
9	462215	367892	221
10	462091	368109	435
11	461998	367997	513
12	461198	367880	797

Map ID	Easting	Northing	2010 #
14	461241	368269	710
15	461102	368270	730
16	460891	368001	590
17	460906	368126	645
18	460762	368253	596
19	460776	368324	584
20	460785	368348	581
21	460822	368419	576
22	460792	368397	579
23	460752	368324	583
24	462104	367844	96
25	462510	367804	83
26	462381	367852	249

Chart 49: Above are the British National Grid easting and northing coordinates for the 26 ancient oaks surveyed within Sherwood Forest NNR.

9.8 Haloing assessment Notes

Ancient Oak ID #1: 2010 Tag #10058: Tree Number 74
Health: Moderate Vitality Structural Condition: C Sustainability: B
Epicormic: Present
Drip Line: N: 3.90m E: 6.50m S: 5.0m W: 3.70m

Tree has multiple decay spots from broken branch wounds. Vertical limbs producing large healthy leaves. Small epicormics buds filling in gaps along vertical limbs. Heavy haloing activity present.

Ancient Oak ID #2: 2010 Tag #10122: Tree Number 195
Health: Mid Decline Structural Condition: C Sustainability: B Epicormic: Present
Drip Line: N: 2.95m E: 1.30m S: 1.15m W: 3.16

Break on south-east side of tree roughly 4 metres high where heartwood has almost completely rotted through. No bark present on south and east sides of tree. Small crown where competition is not present. No epicormics buds on main stem, small epicormics sprouts on canopy interior. Birch on east side of tree although marked for felling should be felled in the immediate future.

Ancient Oak ID #3: 2010 Tag #10187: Tree Number 880
Health: Abundant Structural Condition: C Sustainability: B Epicormic: None
Drip Line: N: 5.50m E: 3.08m S: 4.66m W: 4.0m

Sapwood rot present on south-west side of tree where large vertical branch has broken. Bark intact for entire tree with the exception of two spots where vertical branches have broken and fallen on south and west sides. Crown limited to live portion of tree and leaves appear small. Crown is evident in contrast to 2010 survey. 5 epicormic buds present along main stem and are newly sprouted. No surrounding competition for this tree.

Ancient Oak ID #4: 2010 Tag #10285: Tree Number 329
Health: Mid Decline Structural Condition: D Sustainability: B Epicormic: Present
Drip Line: N: 2.10m E: 3.55m S: 1.95m W: 2.15m

Broken top of tree, wound with heart wood rot on south side of tree. Low epicormic activity sprouting along main stem. Healthy leaves, although small, producing acorns. Lateral branches providing majority of leaf cover. Haloing has been performed, competition could arise from surrounding ancient oaks.

Ancient Oak ID #5: 2010 Tag #10286: Tree Number 330
Health: Mid Decline Structural Condition: B Sustainability: A Epicormic: Abundant
Drip Line: N: 4.05m E: 3.60m S: 3.20m W: 0.40m

Lateral branches in tact and have sprouted epicormics buds and are looking healthy. Some limbs producing acorns. Some epicormics buds on upper main stem. . Full halo for this tree

Ancient Oak ID #6: 2010 Tag #10367: Tree Number 271
Health: Early Decline Structural Condition: B Sustainability: A Epicormic: Super Abundant

Drip Line: N: 8.50m E: 2.90m S: 0.60m W: 6.80m

Tree extremely healthy, crown has regenerated/retrenched. Lateral branches were previously assessed as dead; now have new growth from epicormic buds. Heavy epicormic activity throughout main stem. Leaves healthy and large. Rowan growing on south and north-west sides of tree may need felling in future. Tree has had obvious haloing applied.

Ancient Oak ID #7: 2010 Tag #10368: Tree Number 244
Health: Mid Decline Structural Condition: C Sustainability: B Epicormic: Abundant
Drip Line: N: 9.30m E: 2.90m S: 4.10m W: 8.24m

Tree is still sustaining healthy lateral branches. Few epicormics buds have sprouted at base of lateral limbs. Majority of epicormic buds have sprouted at top of tree where breakage has occurred. Leaves appear very healthy. Heart rot setting in at top where break has occurred.

Ancient Oak ID #8: 2010 Tag #10379: Tree Number 250
Health: Early Decline Structural Condition: B Sustainability: B Epicormic: Super Abundant
Drip Line: N: 8.70m E: 4.50m S: 2.40m W: 5.0m

Large vertical branches on north side of tree. Epicormic sprouts throughout main stem and vertical branches. Break at top of tree with sapwood rot setting in. Tree has been fully haloed.

Ancient Oak ID #9: 2010 Tag #10448: Tree Number 221
Health: Mid Decline Structural Condition: B Sustainability: B Epicormic: Abundant
Drip Line: N: 1.90m E: 1.50m S: 0m W: 4.80m

Two vertical branches on north side of tree with epicormic buds providing majority of live growth for tree. Bark rotting off heavily on east side of tree. Haloing has been performed for this tree heavily. Some epicormics buds sprouting on main stem. Leaves appear shrivelled; however tree appears in better shape compared to previous assessments.

Ancient Oak ID #10: 2010 Tag #10466: Tree Number 435
Health: Normal Vitality Structural Condition: B Sustainability: B Epicormic: Abundant
Drip Line: N: 4.10m E: 3.55m S: 3.85m W: 2.60m

Warped heartwood rot on top of main stem starting on east side roughly 5 metres high. Bark rotting off on east and west sides of tree. Heartwood rot from break wound setting in on west side of tree; and south from broken branch wound. Epicormic branches have matured throughout main vertical branches. Crown skinny but healthy with moderate sized leaves. Heavy evidence of previous felling, with large halo.

Ancient Oak ID #11: 2010 Tag #10485: Tree Number 513
Health: Mid Decline Structural Condition: B Sustainability: B Epicormic: Super Abundant
Drip Line: N: 1.40m E: 2.20m S: 2.40m W: 2.36m

Tree is completely relying on epicormics shoots throughout main stem. Large halo created for this tree with stacked deadwood at base. Bark intact and very distorted from burrs and epicormics buds. Top of tree snapped off at 10 metres from wind damage.

Ancient Oak ID #12: 2010 Tag #10644: Tree Number 797
Health: Severe Decline Structural Condition: C Sustainability: D Epicormic: Abundant
Drip Line: N: 0m E: 0m S: 1.90m W: 1.50m

Tree completely dead with exception of one life branch on south-west side of tree. Live branch relying completely on epicormics branches. Bark still intact on live branch. Birch on south side in need of immediate felling, shading out only surviving section of tree.

Ancient Oak ID #13: 2010 Tag #10690: Tree Number 899
Health: Severe Decline Structural Condition: C Sustainability: C Epicormic: None
Drip Line: N: 3.50m E: 2.90m S: 0m W: 0m

Tree completely dead with exception of live branch on north/north-east side pf tree. No epicormic buds present. Felling of surrounding competition evident. Surrounding tree canopy now within 3 – 4 metres on north-east side near live branch.

Ancient Oak ID #14: 2010 Tag #10756: Tree Number 710
Health: Severe Decline Structural Condition: E Sustainability: B Epicormic: Abundant
Drip Line: N: 4.20m E: 2.70m S: 0m W: 0

Tree is at a hard 45 degree lean to the north/north-east with log prop applied for support. Main stem wound on south side with heartwood rot; vegetation is growing out of heartwood. Drip line for south and west sides of tree are recorded at 0m because of the lean. Epicomic bud activity begins where main stem wound ends, however sparse. All leaves on tree appear small and of moderate vitality. Heavy evidence of halo activity.

Ancient Oak ID #15: 2010 Tag #10778: Tree Number 730
Health: Moderate Vitality Structural Condition: B Sustainability: B Epicormic: Super Abundant
Drip Line: N: 3.40m E: 4.20m S: 3.40m W: 1.20m

Wound on south side of tree where break has occurred, heartwood rot has set in. Heavy epicormics bud activity throughout the bases of the trees vertical braches. Thick mature leaves are being produced from epicormics buds. Birch to west of tree should be considered for felling in future, not immediate concern.

Ancient Oak ID #16: 2010 Tag #11000: Tree Number 590
Health: Normal Vitality Structural Condition: B Sustainability: B Epicormic: Super Abundant
Drip Line: N: 4.16m E: 5.04m S: 5.73m W: 6.56m

Wound on south side of tree 18cm wide at largest point. Heartwood rotted through within wound from base of tree to roughly 3.15 metres high on main stem. Bark has fallen off south/south-west side of tree where sapwood degradation is in process. Main vertical branches are full with large healthy leaves. Trees recommended for felling have been felled from previous 2005 report. Multiple epicormics buds present along main stem. Many epicormics buds providing leaf cover along vertical branches. Tree appears healthy

regardless of past damage. Competition on west side of tree may need felling in future, not urgent.

Ancient Oak ID #17: 2010 Tag #10916: Tree Number 645
Health: Moderate Vitality Structural Condition: B Sustainability: B
Epicormic: Super Abundant
Drip Line: N: 4.25m E: 2.96m S: 3.60m W: 3.36m

Bark decay on south-west side of tree; broken branch on east side of tree. Heavy epicormics activity throughout tree canopy. Leaves healthy and tree is producing acorns. All trees within immediate proximity of tree have been felled.

Ancient Oak ID #18: 2010 Tag #10965: Tree Number 596
Health: Moderate Vitality Structural Condition: B Sustainability: B
Epicormic: Abundant
Drip Line: N: 3.98m E: 3.57m S: 3.40m W: 3m

Bark appears intact in contrast to the 2010 report. Crown appears to be thick and healthy. Epicormic buds growing up main stem, could have appeared where previous branches broke, explaining why bark appears intact. Heavy halo activity surrounding this tree.

Ancient Oak ID #19: 2010 Tag #10971: Tree Number 584
Health: Normal Vitality Structural Condition: C Sustainability: B Epicormic: Present
Drip Line: N: 7.74m E: 3.0m S: 3.60m W: 9.30m

36cm split from bottom to top of main stem with complete heartwood rot. Tree is dead on west/south-west side. Live section on north side of tree. Epicormic growth on base of live vertical branches providing healthy leaves. Leaves on main vertical branches and remaining crown appear thin. Oak on east side and birch trees on south and west sides of tree in need of future felling to ensure adequate exposure to sunlight. Evidence of some felling in past but still incomplete.

Ancient Oak ID #20: 2010 Tag #10972: Tree Number 581
Health: Moderate Vitality Structural Condition: B Sustainability: B
Epicormic: Super Abundant
Drip Line: N: 3.94m E: 6.30m S: 5.71m W: 7.03m

Decay cavities around main stem from broken branches. Crown is thick with healthy vertical branches containing large healthy leaves. Heavy epicormic activity on base of main stem. Evidence of past felling evident. Competition pressuring from west, in need of future felling.

Ancient Oak ID #21: 2010 Tag #10977: Tree Number 576
Health: Moderate Vitality Structural Condition: B Sustainability: B
Epicormic: Super Abundant
Drip Line: N: 5.24m E: 6.55m S: 8.41m W: 5.37m

Multiple dead branches on north-east side of tree; with bark rotted off roughly 4.75m high-up main stem of tree. Multiple epicormics bud activity at base of tree and multiple epicormics buds present along main stem. Evidence of felling surrounding competition by stacked wood and stumps within drip line of tree. Surviving vertical branches are producing heavy leaf cover, although leaves appear small in size. Invasive birch on south side of tree needs felling in very near future; multiple oaks on north-east side of tree will need felling in future.

Ancient Oak ID #22: 2010 Tag #10982: Tree Number 579
Health: Moderate Vitality Structural Condition: D Sustainability: B
Epicormic: None
Drip Line: N: 8.34m E: 6.07m S: 4.0m W: 2.31m

Bark on south side of tree completely gone. Wound on west side of tree with massive heart rot decay. Multiple burrow holes present leading underneath tree into root system. Sapwood rot present on west and south sides of tree. Leaves appear to appear healthy; even with heavy competition impeding on trees crown from north and east sides. There were no epicormics buds present. No evidence of previous felling.

Ancient Oak ID #23: 2010 Tag #10985: Tree Number 583
Health: Moderate Vitality Structural Condition: B Sustainability: A
Epicormic: Abundant
Drip Line: N: 4.83m E: 5.11m S: 6.17m W: 3.98m

Tree healthy with epicormic buds growing on main stem and on bases of vertical branches. Full haloing has occurred.

Ancient Oak ID #24: 2010 Tag #10173: Tree Number 96
Health: Dead Structural Condition: - Sustainability: - Epicormic: -
Drip Line: N: 0m E: 0m S: 0m W: 0m

Tree was found dead.

Ancient Oak ID #25: 2010 Tag #10257: Tree Number 83
Health: Severe Decline Structural Condition: D Sustainability: C
Epicormic: Present
Drip Line: N: 1.60m E: 2.80m S: 3.70m W: 1.90m

No heart wood left through wound from bottom to top on east side of tree. Sapwood degradation from inside out of tree. Some epicormics buds, however no obvious response to haloing efforts.

Ancient Oak ID #26: 2010 Tag #10378: Tree Number 249
Health: Mid Decline Structural Condition: B Sustainability: B Epicormic: Abundant
Drip Line: N: 3.80m E: 2.50m S: 5.70m W: 2.06m

Tree is relying on two main vertical branches on north and south-east sides. Top of tree has broken off from wind damage. Epicormic buds have formed on the bases of the vertical branches. Leaves are small in size. Felling has been performed but not entirely. Felling is needed for oak marked on east side, felling should be considered for saplings on north, north-west side of tree in future.

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