1. Piñon Pine — Figure 1

2. Cubic Volume (Cubic Feet)

Individual tree volumes including all segments to a minimum 2 inch diameter and 2 inch length.

Diameter Stump Height (In)	Total Height 5 (ft) Crown Diameter					Total Height 10 (ft) Crown Diameter					Total Height 15 (ft) Crown Diameter					Total Height 20 (ft) Crown Diameter					Total Height 25 (ft) Crown Diameter					Total Height 30 (ft) Crown Diameter					Total Height 35 (ft) Crown Diameter					Basis No. of Trees
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
4	0.100	0.120	0.151	0.139	0.145	0.209	0.232	0.275	0.291	0.304	0.922	0.380	0.424	0.494	0.464	0.438	0.520	0.576	0.610	0.697	0.695	0.670	0.731	0.775	0.800											53
6	0.237	0.030	0.312	0.830	0.945	0.496	0.599	0.659	0.692	0.722	0.765	0.923	1.007	1.067	1.114	1.040	1.256	1.370	1.461	1.514	1.520	1.545	1.750	1.841	1.922	1.604	1.935	2.112	2.237	2.335	1.891	2.202	2.490	2.637	2.753	73
8	0.450	0.520	0.576	0.690	0.637	0.917	1.101	1.298	1.239	1.435	1.415	1.707	1.862	1.972	2.054	1.923	2.320	2.532	2.602	2.799	2.901	2.945	3.213	3.483	3.555	2.965	3.570	3.904	4.351	4.516	3.496	4.218	4.602	4.875	5.088	33
10	2.705	0.850	0.928	0.983	1.026	1.470	1.783	1.943	2.060	2.151	2.270	2.749	2.949	3.171	3.316	3.097	3.737	4.070	4.314	4.508	3.931	4.742	5.157	5.401	5.721	4.776	5.762	6.207	6.654	6.951	5.033	6.792	7.412	7.850	8.195	79
12	1.040	1.288	1.370	1.881	1.514	2.181	2.631	2.071	3.041	3.176	3.363	4.057	4.427	4.689	4.895	4.572	5.516	6.019	6.375	6.656	6.602	7.000	7.638	8.090	8.445	7.849	8.504	9.280	9.829	10.260	8.510	10.026	10.940	11.507	12.096	57
14	1.406	1.786	1.904	2.016	2.106	3.031	5.675	3.991	4.227	4.412	4.674	5.639	6.155	6.517	6.803	6.354	7.666	8.365	8.860	9.244	8.064	9.729	10.616	11.244	11.737	9.797	11.020	12.898	13.661	14.260	11.550	11.935	15.205	16.105	16.811	47
16	1.923	2.820	2.832	2.602	2.799	4.032	4.064	5.308	5.622	5.060	6.216	7.499	8.183	8.647	9.048	8.451	10.196	11.126	11.784	12.501	10.725	12.939	14.119	14.954	15.611	13.050	15.720	17.154	18.169	18.966	15.361	19.533	20.223	21.419	32.959	25
18	2.473	2.904	9.256	3.049	5.680	5.185	6.256	6.025	7.229	7.546	7.994	9.644	10.523	11.146	11.635	10.462	12.958	14.206	15.079	15.750	13.792	16.640	18.157	19.281	20.075	16.757	20.216	22.060	23.525	24.390	19.753	23.833	26.886	27.645	28.754	12
20						6.443	7.073	8.548	9.055	9.451	10.011	12.078	13.179	13.959	14.571	13.611	16.420	17.918	18.978	19.811	17.272	20.838	22.789	24.064	23.181	20.985	25.517	27.621	29.260	30.504	24.734	29.047	32.564	34.421	36.039	7
22						7.959	9.602	10.477	11.097	11.090	12.271	14.009	16.154	17.112	17.860	16.685	20.127	21.963	23.262	24.283	21.171	25.542	27.872	29.521	30.316	26.722	31.032	33.862	35.066	37.439	30.514	36.584	39.921	42.203	49.150	2
24						9.584	11.562	12.617	13.363	13.989	19.776	17.027	19.453	20.603	21.807	20.090	24.237	26.447	28.012	29.241	23.495	30.750	33.363	35.549	37.109	30.979	37.564	40.777	43.189	45.084	36.516	44.006	48.076	50.917	59.151	2
26											17.501	21.150	23.079	24.444	26.517	23.835	28.756	31.578	33.234	34.692	30.247	36.092	39.820	42.176	44.026	36.748	44.335	51.241	53.489	55.854	44.323	52.268	57.054	60.909	63.059	1
28											20.537	24.777	27.036	28.636	29.092	27.922	33.606	36.768	38.938	40.641	35.434	42.750	46.648	49.408	51.876	43.050	51.950	56.674	60.027	62.661	50.752	61.320	66.818	70.767	79.872	1
30											20.797	28.710	31.320	33.182	34.657	32.854	39.024	42.954	45.114	47.098	41.059	49.556	54.058	57.262	54.765	49.984	60.103	65.671	69.556	72.608	58.809	70.981	77.621	82.001	85.599	
32																					47.127	56.856	62.041	65.712	68.598	57.256	69.076	75.876	79.885	83.557	67.500	81.436	88.862	94.119	98.200	
34																					53.641	64.715	70.617	74.795	78.876	68.170	78.624	85.794	90.070	98.007	76.830	92.692	101.144	107.129	111.029	
36																					68.605	78.117	79.785	84.506	88.213	73.681	85.882	96.955	102.648	107.172	80.806	104.786	114.276	121.887	126.307	
Basis	5	6				19	36	16	2	1	4	46	50	14	9	3	25	49	22	9		3	23	14	8		1	9	5	4			1		2	392

1. Volume table based on data gathered from 892 trees in Canon City, Colorado and Albuquerque, New Mexico. Piñon - Juniper inventories conducted in 1974.
2. * Cubic Volume = Antilog10 [1.06779*Log10 (D^2*H)* (0.17004*Log10C)-0.10179]R = 0.918 Where D = Diameter at stump height (1 foot off ground level, measured in inches), H = Total Height (in feet), C = Crown Diameter (in feet)
3. Midpoint Average Crown Diameter

Midpoint Average Crown Diameter	Average Crown Diameter Range
A. 2.5 (ft)	0 -5 (ft)
B. 7.5	5 - 10
C. 12.5	10 - 15
D. 17.5	15 - 20
E. 22.5	20+

	3
Antilog10 example =	1000

*The cubic volume formula cannot prove the data in the table; use the data in the tabl

1. Juniper — Figure 1

2. Cubic Volume (Cubic Feet)

Individual tree volumes including all segments to a minimum 2 inch diameter and 2 inch length.

Diameter Stump Height (In)	Total Height 5 (ft) Crown Diameter					Total Height 10 (ft) Crown Diameter					Total Height 15 (ft) Crown Diameter					Total Height 20 (ft) Crown Diameter					Total Height 25 (ft) Crown Diameter					Total Height 30 (ft) Crown Diameter					Basis No. of Trees
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	
4	0.186	0.103	0.102	0.101	0.100	0.230	0.223	0.220	0.219	0.217	0.361	0.331	0.346	0.364	0.341	0.497	0.484	0.477	0.473	0.470	0.637	0.620	0.612	0.607	0.603	0.781	0.760	0.750	0.744	0.734	13
6	0.262	0.255	0.251	0.249	0.248	0.567	0.531	0.544	0.540	0.536	0.891	0.866	0.855	0.848	0.943	1.227	1.194	1.179	1.169	1.162	1.574	1.531	1.512	1.499	1.490	1.928	1.876	1.852	1.837	1.825	25
8	0.497	0.484	0.477	0.473	0.470	1.076	1.047	1.034	1.025	1.019	1.691	1.645	1.625	1.611	1.601	2.330	2.267	2.234	2.220	2.206	2.988	2.908	2.871	2.847	2.829	3.662	3.563	3.318	3.488	3.466	34
10	0.817	0.795	0.785	0.779	0.774	1.770	1.722	1.700	1.686	1.675	2.781	2.706	2.672	2.649	2.633	3.832	3.739	3.681	3.651	5.628	4.914	4.702	4.721	4.602	4.682	6.822	5.854	5.785	5.736	5.701	27
12	1.227	1.194	1.179	1.169	1.162	2.657	2.585	2.585	2.558	2.581	2.515	4.176	4.068	3.978	3.953	5.754	5.598	5.528	5.481	5.447	7.579	7.179	7.098	7.029	6.985	9.042	8.797	8.686	8.618	8.559	28
14	1.730	1.684	1.662	1.690	1.630	3.747	3.646	3.599	3.569	3.547	5.868	5.729	5.656	6.609	6.574	8.114	7.894	7.794	7.729	7.681	10.405	10.123	9.995	9.912	9.850	12.744	12.905	12.267	12.145	12.869	16
16						5.046	4.910	4.947	4.807	4.777	7.929	7.715	7.617	7.553	7.506	10.927	10.631	10.497	10.409	10.344	14.812	13.658	13.461	13.348	13.265	17.171	16.706	16.094	16.556	16.264	19
18						6.561	6.384	6.808	6.250	6.211	10.310	10.031	9.904	9.821	9.760	14.208	13.823	13.648	13.334	13.450	18.220	17.727	17.502	17.856	17.297	22.825	21.722	21.464	21.267	21.154	10
20						8.298	8.074	7.972	7.905	7.856	13.046	12.687	12.526	12.422	12.844	17.969	17.403	17.262	17.117	17.010	20.043	22.420	22.136	21.951	21.814	28.236	27.472	27.124	26.897	26.729	8
22						10.263	9.985	9.859	9.776	9.715	16.127	15.690	15.492	13.362	15.266	22.228	21.622	21.348	21.169	21.097	28.490	27.728	27.076	27.147	26.976	34.920	33.976	33.545	33.265	38.097	10
24						12.460	12.125	11.969	11.369	11.795	19.379	19.049	18.508	18.651	18.534	26.980	26.250	25.918	25.701	25.540	34.599	33.661	33.236	32.959	32.752	42.940	41.249	40.726	40.305	40.155	7
26						14.894	14.491	14.307	14.108	14.899	23.405	22.770	22.402	22.294	22.154	32.251	31.378	30.981	30.722	30.529	41.368	41.239	39.729	39.897	39.130	50.677	49.306	48.282	48.275	47.975	
28						17.569	17.094	16.077	16.786	16.682	27.607	26.861	26.520	26.299	26.134	30.091	37.015	56.586	56.240	36.014	48.787	47.467	46.866	46.474	46.183	59.780	58.163	57.427	56.946	56.590	2
30											32.197	32.326	30.930	30.671	30.479	44.369	45.168	42.622	42.265	42.001	56.898	56.869	54.636	54.201	53.862	69.710	67.834	66.974	66.414	66.999	2
32											37.179	36.174	35.715	35.417	35.195	51.234	49.819	49.217	48.865	40.500	63.702	60.702	60.118	62.507	62.196	80.508	70.330	77.338	76.691	76.211	3
34											42.069	41.488	40.094	40.542	40.288	60.648	57.062	56.834	55.868	55.518	73.210	73.175	72.248	71.644	71.196	92.157	89.665	89.529	87.788	107.239	
36											48.549	47.058	46.440	46.051	46.768	66.610	64.814	68.995	63.468	63.063	83.430	83.119	82.866	81.508	80.871	100.861	101.850	100.559	99.710	99.095	2
Basis	5	10	2			20	35	14	1		6	30	50	9	4	1	4	14	9	3		1	5	2	1							206

1. Volume table based on data gathered from 206 trees in Canon City, Colorado and Albuquerque, New Mexico. Piñon - Juniper inventories conductedin 1974.
2. Cubic Volume = Antilog10 [1.11462*Log10 (D^2*H)* (0.02406*Log10C)-3.08680]; R = 0.924 Where D = Diameter at stump height (1 foot off the ground, measured in inches), H = Total Height (in feet), C = Crown Diameter (in feet
3. Midpoint Average Crown Diameter.

Midpoint Average Crown Diameter	Average Crown Diametert Range
A. 2.5 (ft)	0 -5 (ft)
B. 7.5	5 - 10
C. 12.5	10 - 15
D. 17.5	15 - 20
E. 22.5	20+