

# Shotgun Barrels, Chokes 'n Ballistics

## APPROXIMATE NUMBER OF PELLETS PER LOAD

Size		9	8	7½	6	5	4	2	BB	#4 Buck	#3 Buck	#1 Buck	#0 Buck	#00 Buck
Ozs. of shot to the shell	1½				309		186	124	69				16	12
	1¼	731	513	438	281	213	169	113	63	27				
	1⅓	658	461	394	253	191	152	101				12		9
	1	585	410	350	225	170	135	90			20			
	¾	512	359		197	149	118							
	½	439		263	169	128	101							
		293		175	113	85	68							

## CHOKE & PATTERN PERCENTAGES

This chart shows the results to be expected as choke constriction is increased. Note the effect of choke choke as the upper limit of effective choke is reached.

DESIGNATION	CHOKE IN THOUSANDTHS OF AN INCH	PERCENT INCREASE OVER CYL.	PATTERN PERCENT*
Over Choke	.055"	27%	67%
Full	.040"	35%	75%
Imp. Mod.	.030"	33%	73%
Mod.	.020"	27%	67%
Imp. Cyl.	.010"	17%	57%
Skeet Cyl.	.005"	13%	53%
Cyl.	0"	—	40%

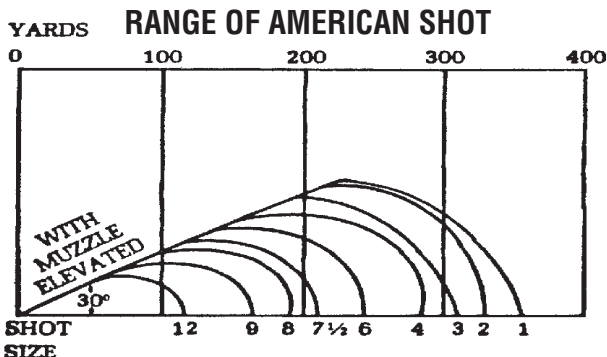
\*Percentages shown are averages, and individual guns or loads may show different results.

## VELOCITY/ENERGY EXTERIOR BALLISTICS — SHOTGUN

Shot Size	f.p.s. at Muzzle	Velocity (f.p.s.) at						Muzzle	Energy in ft./lbs. per pellet at					
		10 yds.	20 yds.	30 yds.	40 yds.	50 yds.	60 yds.		10 yds.	20 yds.	30 yds.	40 yds.	50 yds.	60 yds.
7½	1295	1070	910	795	705	630	575	4.63	3.16	2.30	1.74	1.37	1.10	0.91
8	1255	1035	880	765	675	605	550	3.69	2.50	1.80	1.36	1.07	0.86	0.70
7½	1240	1035	885	770	690	620	560	4.24	2.94	2.16	1.64	1.30	1.06	0.87
8	1235	1020	870	755	670	600	545	3.57	2.43	1.76	1.33	1.05	0.84	0.69
7½	1220	1020	875	765	680	615	560	4.11	2.86	2.11	1.62	1.28	1.04	0.86
8	1220	1010	860	750	665	595	540	3.48	2.38	1.73	1.32	1.03	0.83	0.69
7½	1200	1005	865	760	675	610	555	3.97	2.79	2.06	1.59	1.26	1.02	0.85
8	1200	995	850	745	660	590	540	3.37	2.32	1.69	1.29	1.02	0.82	0.68
9	1200	975	820	710	625	555	505	2.38	1.57	1.11	0.83	0.64	0.51	0.42
8	1165	970	835	730	650	585	530	3.18	2.21	1.62	1.24	0.98	0.80	0.66
9	1165	950	805	695	615	550	495	2.24	1.49	1.07	0.80	0.62	0.50	0.41
8	1155	965	830	725	645	580	530	3.18	2.18	1.60	1.23	0.97	0.79	0.65
9	1155	945	800	695	610	545	495	2.20	1.47	1.06	0.79	0.62	0.49	0.40
7½	1145	965	835	735	655	595	540	3.62	2.57	1.93	1.49	1.19	0.97	0.81
8	1145	960	825	720	640	580	525	3.07	2.15	1.58	1.22	0.96	0.78	0.65

## TIME/DROP EXTERIOR BALLISTICS — SHOTGUN

Shot Size	f.p.s. at Muzzle	Time of Flight (seconds) to						Drop (inches) at					
		10 yds.	20 yds.	30 yds.	40 yds.	50 yds.	60 yds.	10 yds.	20 yds.	30 yds.	40 yds.	50 yds.	60 yds.
7½	1295	.026	.056	.091	.132	.177	.227	0.1	0.6	1.6	3.3	6.0	9.0
8	1255	.027	.058	.095	.137	.184	.236	0.1	0.6	1.7	3.6	6.5	10.7
7½	1240	.027	.058	.094	.136	.184	.233	0.1	0.6	1.7	3.6	6.5	10.5
8	1235	.027	.059	.099	.138	.186	.238	0.1	0.7	2.1	3.7	6.6	11.0
7½	1220	.027	.059	.096	.137	.184	.235	0.1	0.7	1.8	3.6	5.6	10.2
8	1220	.027	.059	.097	.139	.187	.240	0.1	0.7	1.8	3.8	6.8	11.1
7½	1200	.027	.060	.097	.139	.186	.238	0.1	0.7	1.8	3.7	6.7	10.9
8	1200	.027	.060	.098	.141	.189	.242	0.1	0.7	1.9	3.8	6.9	11.3
9	1200	.028	.062	.101	.146	.197	.254	0.1	0.7	2.0	4.1	7.5	12.4
8	1165	.028	.062	.100	.144	.193	.247	0.2	0.7	1.9	4.0	7.2	11.8
9	1165	.029	.063	.103	.149	.201	.258	0.2	0.8	2.1	4.3	7.8	12.9
8	1155	.029	.062	.101	.145	.194	.248	0.2	0.8	2.0	4.0	7.3	11.9
9	1155	.029	.064	.104	.150	.202	.260	0.2	0.8	2.1	4.3	7.9	13.0
7½	1145	.029	.062	.101	.144	.192	.245	0.2	0.7	2.0	4.0	7.1	11.6
8	1145	.029	.063	.102	.146	.195	.250	0.2	0.8	2.1	4.1	7.4	12.0



## RECOIL IN FOOT/POUNDS

Gun Weight (pounds)	Gauge	Load	Comments	Recoil (ft./lbs.)
8.4	12	2¼"	1½ oz. shot	12.5
7.5	20	3" Mag.	factory load	13.0
6.0	12	2¼"	heavy game load	16.0
5.5	12	1 oz. slug		17.0
5.5	12	2¼"	1½ oz. shot	24.0
5.5	12	3" Mag.	1½ oz. slug	33.0
8.0	12	3" Mag.	1½ oz. shot	37.0
6.0	12	3" Mag.	1½ oz. slug	45.0
6.25	12	3½" Mag.	2 oz. shot	55.0
6.25	12	3½" Mag.	2½ oz. shot	70.0