

# © TOM ROSTER'S 2013 NONTOXIC SHOT LETHALITY TABLE©

Proven Nontoxic Shot Loads For Waterfowl & Upland Game Birds <sup>1</sup> <i>Load Velocity: 1,225 - 1,600 FPS</i>  <b>ACTIVITY</b>	Typical Shooting Range of Activity (Yards)	Most Effective Nontoxic Shot Size(s) For Birds Listed Under ACTIVITY At The Distances Listed In The Second Column	Minimum Load Weight (Ounces)	Minimum Pellet Hits Needed on Lethal Areas for Clean Kills	Minimum Pattern Count Needed at Any Distance for Clean Kills (# of Pellets in 30" Circle)	Most Effective Choke(s) (Given in Lead Shot Choke Designations)	NOTE: The pellets in the steel shot loads listed in this table were traditional, highly spherical ball-shaped pellets of ~ 7.86 g/cc density and 90-95 DPH hardness. The HEVI-Shot pellets were of 12.0 g/cc density and slightly harder than traditional steel pellets.
<b>Large Geese At Long Range</b> Giant, Western, Atlantic and Interior Canadas	50-65	Steel BBB to T	1-1/4	1-2	50-55	Improved Modified	
	50-70	HEVI-Shot 2 to B	1-1/2	1-2	50-55	Improved Modified, Full	
<b>Large Geese Over Decoys</b>	35-50	Steel BB to BBB	1-1/4	1-2	50-55	Improved Cylinder, Modified	
	35-50	HEVI-Shot 2 to B	1-1/2	1-2	50-55	Improved Cylinder, Modified	
<b>Medium/Small Geese Long Range</b> Snow, White-fronted, Lesser Canadas	50-65	Steel BB to BBB	1-1/4	1-2	60-65	Improved Modified	
	50-65	HEVI-Shot 2	1-1/2	1-2	60-65	Improved Modified, Full	
<b>Medium/Small Geese Over Decoys</b>	35-50	Steel 2 to BB	1-1/8	1-2	60-65	Light Modified, Modified	
	35-50	HEVI-Shot 4 to 2	1-1/4	1-2	60-65	Improved Cylinder, Modified	
<b>Large Ducks At Long Range</b> Mallard, Black, Pintail, Goldeneye, Gadwall	45-65	Steel 2 to 1	1-1/8	1-2	85-90	Improved Modified, Full	
	45-65	HEVI-Shot 4	1-1/4	1-2	85-90	Improved Modified, Full	
<b>Large Ducks Over Decoys</b>	20-45	Steel 6 to 2	3/4 - 1	1-2	85-90	I.C. (20-35 Yds), Mod. (35-45 Yds)	
	20-45	HEVI-Shot 6 to 4	1-1/8	1-2	85-90	I.C. (20-35 Yds), Mod. (35-45 Yds)	
<b>Medium Ducks Over Decoys</b> Wigeon, Scaup, Shoveler	20-45	Steel 6 to 3	1	1-2	115-120	I.C. (20-35 Yds), Mod. (35-45 Yds)	
	20-45	HEVI-Shot 6 to 4	1-1/8	1-2	115-120	I.C. (20-35 Yds), Mod. (35-45 Yds)	
<b>Small Ducks Over Decoys</b> Teal, Ruddy, Bufflehead	20-45	Steel 6 to 4	1	1-2	135-145	Mod. (20-35 Yds), Full (35-45 Yds)	
	20-45	HEVI-Shot 6	1-1/8	1-2	135-145	Mod. (20-35 Yds), Full (35-45 Yds)	
<b>Ring-Necked Pheasants</b>	20-50	Steel 3 to 2	1	2-3	90-95	I.C. (20-30 Yds), Mod. (30-50 Yds)	
	20-50	HEVI-Shot 6 to 4	1-1/8	2-3	90-95	I.C. (20-30 Yds), Mod. (30-50 Yds)	
<b>Turkeys (Head and Neck Shots)</b>	20-40	Steel 4	1-1/4	3-4	210-230	Full or Extra Full	
<b>Northern Bobwhite Quail</b>	20-30	Steel 7	5/8	1-2	170-190	Imp. Cyl., Light Modified	
<b>Swatter Load For Wounded Birds</b>	20-30	Steel 7 to 6	1	1	175	Improved Modified, Full	

This table summarizes Tom Roster's analyses to date of the waterfowl lethality data bases for certain of the 15 U.S. steel versus lead waterfowl shooting tests run between 1968 & 1982 & one steel-only pheasant shooting test plus lethality data bases owned by ammunition companies for birds taken with nontoxic shotshell loads Roster tested for them & the CONSEP organization. Note: Steel #BBB (.190") and HEVI-Shot #2 (.150") have exhibited the best all-around performance for taking geese; steel #3 (.140") and HEVI-Shot #4 (.130") the best all-around performance for taking ducks; and steel #2 and HEVI-Shot #4 the best all-around performance for taking ring-necked pheasants.

<sup>1</sup>These findings are derived from testing 3" 20 gauge; 2 1/4", 3" and 3 1/2" 12 gauge; and 3 1/2" 10 gauge steel loads; plus 3" 20 gauge and 2 1/4" and 3" 12 gauge HEVI-Shot loads.