

TOM ROSTER'S 2012 NONTOXIC SHOT LETHALITY TABLE[®]

Proven Nontoxic Shot Loads For Waterfowl & Upland Game Birds¹ <i>Load Velocity: 1,225 - 1,450 FPS</i> ACTIVITY	Typical Shooting Range of Activity (Yards)	Most Effective Nontoxic Shot Size(s) For Birds Listed Under the First Column Entitled ACTIVITY	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)	<small>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.</small>
Large Geese At Long Range Giant, Western, Atlantic and Interior Canadas	50-65 50-70	Steel BBB to T HEVI-Shot 2 to B	1-1/4 1-1/2	1-2 1-2	50-55 50-55	Improved Modified Improved Modified, Full	
Large Geese Over Decoys	35-50 35-50	Steel BB to BBB HEVI-Shot 2 to B	1-1/4 1-1/2	1-2 1-2	50-55 50-55	Improved Cylinder, Modified Improved Cylinder, Modified	
Medium/Small Geese Long Range Snow, White-fronted, Lesser Canadas	50-65 50-65	Steel BB to BBB HEVI-Shot 2	1-1/4 1-1/2	1-2 1-2	60-65 60-65	Improved Modified Improved Modified, Full	
Medium/Small Geese Over Decoys	35-50 35-50	Steel 2 to BB HEVI-Shot 4 to 2	1-1/8 1-1/4	1-2 1-2	60-65 60-65	Light Modified, Modified Improved Cylinder, Modified	
Large Ducks At Long Range Mallard, Black, Pintail, Goldeneye, Gadwall	45-65 45-65	Steel 2 to 1 HEVI-Shot 4	1-1/8 1-1/4	1-2 1-2	85-90 85-90	Improved Modified, Full Improved Modified, Full	
Large Ducks Over Decoys	20-45 20-45	Steel 6 to 2 HEVI-Shot 6 to 4	3/4 - 1 1-1/8	1-2 1-2	85-90 85-90	I.C. (20-35 Yds), Mod. (35-45 Yds) I.C. (20-35 Yds), Mod. (35-45 Yds)	
Medium Ducks Over Decoys Wigeon, Scaup, Shoveler	20-45 20-45	Steel 6 to 3 HEVI-Shot 6 to 4	1 1-1/8	1-2 1-2	115-120 115-120	I.C. (20-35 Yds), Mod. (35-45 Yds) I.C. (20-35 Yds), Mod. (35-45 Yds)	
Small Ducks Over Decoys Teal, Ruddy, Bufflehead	20-45 20-45	Steel 6 to 4 HEVI-Shot 6	1 1-1/8	1-2 1-2	135-145 135-145	Mod. (20-35 Yds), Full (35-45 Yds) Mod. (20-35 Yds), Full (35-45 Yds)	
Ring-Necked Pheasants	20-50 20-50	Steel 3 to 2 HEVI-Shot 4	1 1-1/8	2-3 2-3	90-95 90-95	I.C. (20-30 Yds), Mod. (30-50 Yds) I.C. (20-30 Yds), Mod. (30-50 Yds)	
Turkeys (Head and Neck Shots)	20-40	Steel 4	1-1/4	3-4	210-230	Full or Extra Full	
Swatter Load For Wounded Birds	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.

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