

FEDERAL
PREMIUM
AMMUNITION

2004 Federal Catalog



Every shot counts™

FEDERAL
PREMIUM
AMMUNITION

Pristine, tranquil, protected.

Conservation Minded for a Secure Future in the Field

No one knows better than Federal® Premium® Ammunition how important it is to support the groups that protect our hunting and shooting heritage. From the National Shooting Sports Foundation's essential Heritage Fund to critical national wildlife organizations, Federal donates dollars and resources to ensure a promising future in the field for our nation's youth. National support of a host of key groups and wildlife organizations, along with special conservation edition loads, tell the world that Federal Premium Ammunition cares about the precious land we're all privileged to enjoy and the animals that inhabit it.

Join us in the effort to preserve the hunting and shooting sports so that generations to come can enjoy the freedom we often take for granted. Read on to find out more about a few of the major organizations Federal supports and how you too can help make a difference.

Shooting Organizations

National Shooting Sports Foundation (NSSF)



The NSSF has a number of specific organizations under its umbrella that cater to different segments of the shooting sports. Each is just as important as the next to preserving our heritage. Two notable groups that Federal touts its support of are: Step Outside—a program designed to increase participation in target shooting and hunting by building partnerships with non-governmental organizations and state wildlife agencies. This program encourages individual sportsmen to introduce someone to hunting and shooting. The Hunting and Shooting Sports Heritage Fund—a fund designated specifically for protecting the industry from frivolous lawsuits and creating public awareness campaigns to grow membership. Federal is a proud sponsor of the NSSF and specifically these two facets of its mission.

Visit www.nssf.org to join the countless number of individual members dedicated to making a difference.

4-H Shooting Sports Program



The mission of 4-H is to engage youth and adults in responsible community change. To that end, 4-H has established a Shooting Sports Program that teaches youth about proper and safe firearm usage within the context of enjoying, appreciating, and respecting the natural world. 4-H seeks to develop in youth self-confidence, discipline, responsibility, and sportsmanship. With the Shooting Sports Program, 4-H hopes that youth will develop the attitude and skill they need to become lifelong safe, responsible hunters and shooters.

Federal has sponsored 4-H conservation programs since 1934 and has provided leadership to the 4-H Shooting Sports Program since its inception in 1976.

See www.4-Hshootingports.org for more information.

Please join Federal in supporting those hunting and shooting suppliers who choose to give back a portion of their profits to organizations who promote and strive for conservation of our natural resources and habitats, and who support our heritage.

Conservation Groups

National Wild Turkey Federation



Since 1973, the NWTF, along with state agencies and its corporate partners, has helped the turkey population in North America increase from 1.3 million to more than 5.6 million birds. Now more than 500,000 members strong, the NWTF is continuing to help turkey populations expand, is improving habitat for all wildlife and providing opportunity to countless new outdoor enthusiasts. Every box of Federal Premium NWTF Mag•Shok turkey loads that you buy puts money into this important organization.

Visit www.nwtf.org to find out how you can be part of the amazing resurgence of the wild turkey in the United States.

Pheasants Forever



The mission of Pheasants Forever is to protect and to enhance pheasant and other upland wildlife populations through habitat improvement, public awareness and education programs and land management policy refinement. Pheasants Forever accomplishes its goals primarily through a nationwide network of chapters that raise money at annual banquets and use 100% of the net funds for local habitat projects. Federal has been actively supporting this organization for many years and provides a percentage of sales to its cause from its Pheasants Forever edition Wing•Shok loads featuring the PF logo.

See www.pheasantsforever.org for membership information.

Rocky Mountain Elk Foundation (RMEF)



The Rocky Mountain Elk Foundation is an international, mission based, nonprofit wildlife habitat conservation organization. With more than 132,000 members, it has conserved and enhanced more than 3 million acres of wildlife habitat throughout North America. Founded in 1984, the Elk Foundation is headquartered in Missoula, Montana with Canadian headquarters in Rocky Mountain House, Alberta. Federal Premium Vital•Shok High Energy loads proudly display the RMEF logo and tell you that each box purchased will result in additional dollars for habitat.

Visit www.rmef.org to find out more.

Safari Club International



The Safari Club is a nonprofit organization formed to promote good fellowship and communication among sportsmen and conservationists. The organization promotes conservation of the world's wildlife as a valuable, renewable resource in which hunting is one management tool among many. It also believes that conservation efforts can be increased through education programs and teacher training workshops that emphasize the wise use and management our natural resources. Federal has long been a sponsor of this key organization and its American Wilderness Leadership School.

For more information, visit www.scifirstforhunters.org.

NEW in 2004

FEDERAL PREMIUM AMMUNITION



"Shoking" the System



Noticed anything different about us lately? Chances are you've already seen The New Look of Leadership on shelves across the nation—a look that includes the new design of our image and its round "shockwave" logo. Sure, Federal still offers its renowned Premium line of shotgun, rifle and pistol ammunition, but the name and packaging have undergone some exciting changes that reflect the superior technology we put into every cartridge developed. To further solidify a commitment to you, we've taken steps to make choosing ammunition easier. Notice how expansive your local sporting good store's ammunition selection is these days? Unless you're a diehard ballistics technician, finding the best ammunition for your needs can be daunting. That's why Federal repositioned its product lines to better serve hunters and shooters. Every new box will feature important information on product application and performance.

You'll see in this catalog that for each category of ammunition, there is a specific name that denotes it from the rest—as well as an icon and game guide that clearly show for which game each ammunition is best suited. For the upland bird hunter, there's the devastating performance of Wingshok™. Turkey hunters will seek out MagShok™. Waterfowl hunters will take UltraShok™ with them to the blind for speed and consistency. Deer hunters will find VitalShok™ to be the most complete line of premium ammunition with the best bullets available. Varmint hunters will choose VShok™ for the outstanding terminal performance and explosive disruption its bullet choices provide. For safari or dangerous game hunters, CapeShok™ is the only reasonable choice. And Gold Medal™ is the number one choice for target shooters.

"What about my favorite Federal Classic loads?" The cost-conscious shooter that doesn't want to forfeit performance will find a new, blue-tone box featuring the same great products and more. Look for PowerShok™ medium to large game cartridges, GameShok™ upland and small game ammunition, Champion® and Top Gun® target loads and SpeedShok™ waterfowl loads.

We listened to you when repositioning our products, so pick up your favorite and enjoy its new look and outstanding performance—it's your hunt...it's your ammunition.

TABLE OF CONTENTS

Conservation	2
New Products	3-5
Centerfire Rifle	6-17
Handgun	18-20
Rimfire	21-22
Primers & Wads	23
Slug & Buckshot	24-25
Shotshell	26-30
ATK Brands Page	31



Photo courtesy of Winterhawk Outfitters

Federal Cartridge reserves the right to change or discontinue any load at any time.

FEDERAL® PREMIUM® CENTERFIRE RIFLE



Pumping up the Premium® Lineup
 When Federal began loading its Premium line of rifle cartridges in 1977, it broke new ground in the ammunition business and established a reputation for providing the best available bullets in a top-quality cartridge. With stringent quality control and outstanding accuracy and ballistics, it left many handloaders to ponder the advantages of their hard work at the reloading bench. Although others have since followed, no one offers a better selection of premium-grade rifle ammunition. Federal Premium Ammunition is synonymous with best-in-class quality and continues to improve on its already strong rifle line with these great new bullet choices. When you have only one shot, make it count.



NOSLER® SOLID BASE
 Federal's exclusive Solid Base offering boasts extremely consistent accuracy, a high ballistic coefficient and the flight characteristics of a ballistic tip. Solid Base's new tapered jacket provides extremely controlled expansion and reliable performance. This bullet provides you with Premium performance at an affordable cost and is available in more than 22 configurations.



NOSLER® ACCUBOND™
 Nosler is doing it again. The highly popular bullet maker released yet another gem—AccuBond. It touts the terminal performance of a bonded bullet with the accuracy and retained energy of a ballistic tip. And Federal is loading it in more than 11 popular configurations from .270 WSM to .375 H&H Magnum.



NOSLER® PARTITION®
 From its inception, Nosler's Partition has been known as one of the original premium big game bullets and it continues to be a standard for consistent performance. For medium to large game animals, its partitioned copper jacket allows the front half of the bullet to mushroom, while the rear core remains intact, driving forward for deep penetration and stopping power. You'll find 13 new cartridge options this year for this tried and true bullet.



NOSLER® BALLISTIC TIP®
 With proven fast, flat-shooting wind-defying performance, Ballistic Tip is specifically designed for long-range shots at varmints, predators and small to medium game. A color-coded polycarbonate tip provides easy identification, prevents deformation in the magazine and drives back on impact for expansion and immediate energy transfer. New for this year are 18 ballistic tip loads, including the widely popular Short and Super Short Magnum cartridges.



BARNES TRIPLE SHOCK® X-BULLET
 Brand new for 2004 are 10 TSX-Bullet™ loads, designed for improved expansion and deep penetration. Triple-Shock is an extremely accurate bullet specially designed to reduce pressure and barrel fouling. Its all-copper construction provides high weight retention to bring game down hard. Look for this exciting new bullet in your favorite caliber.



TROPHY BONDED® BEAR CLAW
 Little did we know that when this bullet was developed by Jack Carter in 1985 it would set the absolute standard for bullet performance. Ideal for either medium or large dangerous game, this outstanding performer features 100% fusion bonding for reliable expansion at any range. With 95% weight retention and a whole host of fans, this bullet is the perfect choice for the serious hunter—and is now available in 2 new WSM loads.

DO NOT SCALE ANG. SCALE 2:1 MATERIAL PART #

FEDERAL PREMIUM AMMUNITION

FEDERAL CARTRIDGE COMPANY ANOKA, MINNESOTA

4

NEW in 2004

FEDERAL PREMIUM AMMUNITION



LOW RECOIL CENTERFIRE RIFLE

SOFT POINT

For the shooter who's learning his or her way around a rifle, we have the perfect round. Our new Low Recoil cartridges are softer shooting for those learning how to properly handle a rifle. They're also fully effective on medium game—making them the perfect choice for anyone who prefers a lighter kick from their favorite rifle. Whether learning or experienced, Low Recoil cartridges from Federal offer consistent bullet performance in a new soft point specifically designed for performance inside 200 yards. Available in .308 and .30-06.

Look for the Low Recoil logo on select products for a softer shooting load.



PREMIUM CENTERFIRE PISTOL

45 G.A.P.

Federal Premium is now offering the latest technological development in pistol ammunition. Working closely with Glock and Federal sister company, Speer, the new .45 Glock Automatic Pistol (G.A.P.) round emerged. Built specifically for use in the new, smaller-frame Glock 37 pistol, it provides .45 ACP performance in a shorter cartridge. Loaded with Hydra-Shok, this new caliber provides the ideal solution for personal defense applications.



PREMIUM SHOTSHELL

BARNES EXPANDER

There's no disputing the outstanding performance of the Barnes Expander shotgun slug. For accuracy, weight retention and expansion, it is the slug hunter's choice. This heavy hitter is now available in a lightning fast 3-inch, 20-gauge shotshell. Clocking in at 1900 feet per second and capable of 2" groups at 100 yards or more, you'll be sure to hit your target and drop your next meal. For use in fully rifled barrels only.



PREMIUM RIMFIRE

17 HMR

The success of the .17 caliber cartridge has been unprecedented. When you get your hands on a rifle, it's a given that you won't be able to put it down. Whether you're plinking cans or plucking varmints off their mounds, be sure to shoot the best. Federal Premium 17 HMR is available with a 17-grain Speer TNT bullet and Hornady V-Max Polymer Tip 17-grain. Enjoy all 2,550 feet per second of this great caliber's muzzle velocity—its low recoil will keep you shooting all day long.





Premium® Vital•Shok™

The Trophy Hunter's Choice



VITAL•SHOK™ CENTERFIRE RIFLE



FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN GRAINS GRAMS		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)						ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)						
						MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	
◇	P223T2	223 Rem. (5.56x45mm)	55	3.56	Trophy Bonded Bear Claw**	205	3100	2630	2210	1830	1500	1240	1175	845	595	410	275	185
NEW	P223Q	223 Rem. (5.56x45mm)	60	3.89	Nosler Partition	205	3160	2740	2350	2000	1680	1410	1330	1000	740	535	380	265
◇	P22250T1	22-250 Rem.	55	3.56	Trophy Bonded Bear Claw**	210	3600	3080	2610	2190	1810	1490	1585	1155	835	590	400	270
NEW	P22250G	22-250 Rem.	60	3.89	Nosler Partition	210	3500	3050	2630	2260	1910	1610	1630	1235	925	680	490	345
	P243D	243 Win. (6.16x51mm)	85	5.50	Sierra GameKing BTHP	210	3320	3070	2830	2600	2380	2180	2080	1770	1510	1280	1070	890
NEW	P243J	243 Win. (6.16x51mm)	95	6.16	Nosler Ballistic Tip	210	3030	2770	2540	2310	2100	1900	1930	1625	1360	1125	930	760
NEW	P243S1	243 Win. (6.16x51mm)	100	6.48	Nosler Solid Base BT	210	2970	2720	2490	2280	2070	1870	1950	1645	1380	1150	950	780
	P243C	243 Win. (6.16x51mm)	100	6.48	Sierra GameKing BTSP	210	2960	2760	2570	2380	2210	2040	1950	1690	1460	1260	1080	925
	P243E	243 Win. (6.16x51mm)	100	6.48	Nosler Partition**	210	2960	2730	2510	2300	2100	1910	1945	1650	1395	1170	975	805
	P6C	6mm Rem.	100	6.48	Nosler Partition	210	3100	2860	2640	2420	2220	2020	2135	1820	1545	1300	1090	910
	P257B	257 Roberts (High-Velocity + P)	120	7.77	Nosler Partition	210	2780	2560	2360	2160	1970	1790	2060	1750	1480	1240	1030	855
	P2506D	25-06 Rem.	100	6.48	Nosler Ballistic Tip	210	3210	2960	2720	2490	2280	2070	2290	1940	1640	1380	1150	955
NEW	P2506H	25-06 Rem.	100	6.48	Barnes Triple-Shock X-Bullet	210	3210	2970	2750	2540	2330	2140	2290	1965	1680	1430	1205	1015
	P2506E	25-06 Rem.	115	7.45	Nosler Partition	210	2990	2750	2520	2300	2100	1900	2285	1930	1620	1350	1120	915
◇	P2506T1	25-06 Rem.	115	7.45	Trophy Bonded Bear Claw	210	2990	2740	2500	2270	2050	1850	2285	1910	1590	1310	1075	870
	P2506C	25-06 Rem.	117	7.58	Sierra GameKing BTSP	210	2990	2770	2570	2370	2190	2000	2320	2000	1715	1465	1240	1045
NEW	P260B	260 Rem.	120	7.78	Nosler Ballistic Tip	210	2950	2750	2550	2360	2180	2010	2320	2005	1730	1485	1270	1075
	P260A	260 Rem.	140	9.07	Sierra GameKing BTSP	210	2750	2570	2390	2220	2060	1900	2350	2045	1775	1535	1315	1125
	P270D	270 Win.	130	8.42	Sierra GameKing BTSP	210	3060	2830	2620	2410	2220	2030	2700	2320	1980	1680	1420	1190
	P270F	270 Win.	130	8.42	Nosler Ballistic Tip	210	3060	2840	2630	2430	2230	2050	2700	2325	1990	1700	1440	1210
NEW	P270S1	270 Win.	130	8.42	Nosler Solid Base BT	210	3050	2820	2610	2400	2200	2010	2685	2300	1960	1660	1400	1170
◇	P270L	270 Win.	130	8.42	Barnes Triple-Shock X-Bullet	210	3060	2840	2620	2420	2220	2040	2705	2320	1985	1690	1425	1200
◇	P270T1	270 Win.	140	9.07	Trophy Bonded Bear Claw	210	2940	2700	2480	2260	2060	1860	2685	2270	1905	1590	1315	1080
◇ HE	P270T3	270 Win.	140	9.07	Trophy Bonded Bear Claw	210	3100	2860	2620	2400	2200	2000	2990	2535	2140	1795	1500	1240
NEW	P270A1	270 Win.	140	9.07	Nosler AccuBond	215	2950	2760	2570	2400	2230	2070	2695	2360	2060	1790	1550	1335
	P270C	270 Win.	150	9.72	Sierra GameKing BTSP	210	2850	2660	2480	2300	2130	1970	2705	2355	2040	1760	1510	1290
	P270E	270 Win.	150	9.72	Nosler Partition	210	2850	2650	2460	2280	2110	1940	2705	2345	2020	1735	1480	1255
NEW	P270WSMS1	270 Win. Short Magnum	130	8.42	Nosler Solid Base BT	215	3280	3040	2810	2590	2390	2190	3095	2660	2275	1940	1640	1380
NEW	P270WSMB	270 Win. Short Magnum	130	8.42	Nosler Ballistic Tip	215	3300	3070	2840	2630	2430	2240	3145	2710	2335	2000	1705	1445
NEW	P270WSMD	270 Win. Short Magnum	130	8.42	Barnes Triple-Shock X-Bullet	215	3280	3040	2810	2590	2390	2190	3095	2660	2275	1940	1640	1380
NEW	P270WSMA1	270 Win. Short Magnum	140	9.07	Nosler AccuBond	215	3200	3000	2810	2620	2450	2280	3185	2795	2450	2140	1860	1610
NEW	P270WSMC	270 Win. Short Magnum	150	9.72	Nosler Partition	215	3160	2950	2750	2550	2370	2190	3325	2895	2510	2170	1865	1600
◇ NEW	P270WSMT1	270 Win. Short Magnum	140	9.07	Trophy Bonded Bear Claw	215	3200	2950	2710	2480	2260	2060	3185	2700	2275	1910	1590	1315
◇ NEW	P270WBS1	270 Weatherby Magnum	130	8.42	Nosler Solid Base BT	215	3280	3040	2810	2590	2390	2190	3095	2660	2275	1940	1640	1380
◇	P270WBT1	270 Weatherby Magnum	140	9.07	Trophy Bonded Bear Claw	215	3100	2840	2600	2370	2150	1950	2990	2510	2100	1745	1440	1175
	P730A	7-30 Waters	120	7.77	Sierra GameKing BTSP-FN	210	2700	2300	1930	1600	1330	1140	1940	1405	990	685	470	345
	P7C	7mm Mauser (7x57mm Mauser)	140	9.07	Nosler Partition	210	2660	2450	2260	2070	1890	1730	2200	1865	1585	1330	1110	930
NEW	P7WSMB	7mm Win. Short Magnum	140	9.07	Nosler Ballistic Tip	215	3310	3100	2900	2710	2520	2350	3405	2985	2610	2280	1980	1710
NEW	P7WSMS1	7mm Win. Short Magnum	150	9.72	Nosler Solid Base BT	215	3230	3010	2800	2600	2410	2230	3465	3010	2610	2250	1940	1660
NEW	P7WSMA1	7mm Win. Short Magnum	160	10.37	Nosler AccuBond	215	3120	2940	2760	2560	2430	2270	3460	3060	2705	2380	2090	1825
NEW	P7WSMC	7mm Win. Short Magnum	160	10.37	Nosler Partition	215	3160	2950	2760	2570	2380	2210	3545	3095	2695	2335	2020	1735
◇ NEW	P7WSMT1	7mm Win. Short Magnum	160	10.37	Trophy Bonded Bear Claw	215	3120	2890	2660	2440	2230	2040	3460	2950	2500	2110	1770	1475
NEW	P7WSMD	7mm Win. Short Magnum	160	10.37	Barnes Triple-Shock X-Bullet	215	2990	2780	2590	2400	2220	2050	3175	2755	2380	2045	1750	1485
	P708A	7mm-08 Rem.	140	9.07	Nosler Partition	210	2800	2590	2390	2200	2020	1840	2435	2085	1775	1500	1265	1060
	P708B	7mm-08 Rem.	140	9.07	Nosler Ballistic Tip	210	2800	2610	2430	2260	2100	1940	2440	2135	1840	1590	1360	1165
NEW	P708S1	7mm-08 Rem.	140	9.07	Nosler Solid Base BT	210	2880	2680	2490	2300	2130	1960	2580	2230	1925	1650	1405	1195
NEW	P280D	280 Rem.	140	9.07	Nosler Partition	210	2990	2790	2610	2430	2260	2090	2780	2425	2115	1830	1580	1350
NEW	P280S1	280 Rem.	140	9.07	Nosler Solid Base BT	210	3030	2820	2620	2430	2250	2080	2845	2470	2135	1835	1570	1340
	P280A	280 Rem.	150	9.72	Nosler Partition	210	2890	2690	2490	2310	2130	1960	2780	2405	2070	1770	1510	1275
◇	P280T3	280 Rem.	160	10.37	Trophy Bonded Bear Claw	210	2800	2580	2370	2170	1980	1810	2785	2365	2000	1675	1395	1160
	P7RG	7mm Rem. Magnum	140	9.07	Nosler Partition	215	3150	2930	2710	2510	2320	2130	3085	2660	2290	1960	1670	1415
NEW	P7RL	7mm Rem. Magnum	140	9.07	Nosler Ballistic Tip	215	3100	2900	2710	2520	2350	2180	2985	2615	2280	1980	1715	1475
	P7RD	7mm Rem. Magnum	150	9.72	Sierra GameKing BTSP	215	3110	2920	2750	2580	2410	2250	3220	2850	2510	2210	1930	1690
	P7RH	7mm Rem. Magnum	150	9.72	Nosler Ballistic Tip	215	3110	2910	2720	2540	2370	2200	3220	2825	2470	2150	1865	1610
NEW	P7RS1	7mm Rem. Magnum	150	9.72	Nosler Solid Base BT	215	3100	2890	2690	2490	2310	2130	3200	2780	2405	2070	1775	1515
NEW	P7RR	7mm Rem. Magnum	160	10.37	Barnes Triple-Shock X-Bullet	215	2940	2740	2540	2360	2180	2010	3070	2660	2295	1970	1680	1430

HE = High Energy (NOT recommended for semi-automatic rifles) ◇ = Nickel Plated Case **Moly-Coat = Molybdenum disulfide dry film lubricant +P ammunition is loaded to a higher pressure. Use only in firearms recommended by the gun manufacturer. BTHP = Boat-Tail Hollow Point BTSP = Boat-Tail Soft Point BT = Boat-Tail FN = Flat Nose Partition, AccuBond and Ballistic Tip are registered trademarks of Nosler Bullets, Inc. GameKing is a registered trademark of Sierra Bullets, Inc. Barnes is a registered trademark of Barnes Bullets. X-Bullet and Triple-Shock are trademarks of Barnes Bullets.

Additional offerings available in Cape-Shok® and V-Shok® on pages 10-11.



Centerfire Rifle



From the world leader in premium ammunition comes Vital•Shok—your best option for medium to large game. You spend all year dreaming of the moment of truth, so why trust that moment to anything less. Vital•Shok is available in the world's finest big game bullets, from the unrivaled Speer® Trophy Bonded Bear Claw® and Nosler's latest offerings to Sierra® and Barnes®. Match that with world-class brass, select powders and legendary primers and you get unmatched Premium performance. Federal Premium Vital•Shok—because Every Shot Counts. All High Energy loads feature the



Rocky Mountain Elk Foundation logo—meaning a portion of proceeds go directly to this key organization.

WIND DRIFT IN INCHES 10 MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 0 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE AVERAGE RANGE										FEDERAL LOAD NO.	
100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.
1.5	6.3	15.5	30.4	52.3	-0.2	⊕	-3.6	-14.3	+0.7	+1.8	⊕	-8.9	-28.7	-64.5	24	P223T2
1.2	5.3	13.0	25.0	42.6	-0.2	⊕	-3.2	-12.7	+0.5	+1.6	⊕	-7.9	-24.6	-53.7	24	P223O
1.2	5.2	12.5	24.3	41.9	-0.4	⊕	-2.2	-9.5	+0.2	+1.1	⊕	-6.2	-19.8	-44.5	24	P22250T1
1.1	4.7	11.2	21.5	36.6	-0.3	⊕	-2.3	-9.6	+0.2	+1.1	⊕	-6.2	-19.3	-41.9	24	P22250G
0.7	2.7	6.3	11.6	18.8	-0.3	⊕	-2.2	-8.8	+0.2	+1.1	⊕	-5.5	-16.1	-32.8	24	P243D
0.8	3.2	7.6	14.1	23.1	-0.2	⊕	-3.0	-11.5	+0.5	+1.5	⊕	-6.9	-20.4	-41.8	24	P243J
0.8	3.2	7.6	14.1	23.1	-0.2	⊕	-3.2	-12.0	+0.6	+1.6	⊕	-7.2	-21.1	-43.2	24	P243S1
0.6	2.6	6.1	11.3	18.4	-0.2	⊕	-3.1	-11.4	+0.6	+1.5	⊕	-6.8	-19.8	-39.9	24	P243C
0.7	3.1	7.3	13.5	22.1	-0.2	⊕	-3.2	-11.9	+0.6	+1.6	⊕	-7.1	-20.9	-42.5	24	P243E
1.0	4.1	9.8	18.7	31.3	-0.3	⊕	-2.3	-9.4	+0.2	+1.1	⊕	-6.0	-18.3	-39.2	24	P6C
0.7	2.9	6.7	12.5	20.4	-0.3	⊕	-2.8	-10.5	+0.4	+1.4	⊕	-6.3	-18.7	-38.1	24	P257B
0.7	2.8	6.5	12.0	19.6	-0.2	⊕	-3.0	-11.4	+0.5	+1.5	⊕	-6.8	-19.9	-40.4	24	P2506D
0.8	3.2	7.4	13.9	22.6	-0.2	⊕	-3.1	-11.7	+0.6	+1.6	⊕	-7.0	-20.8	-42.2	24	P2506H
0.7	2.9	6.7	12.4	20.2	-0.3	⊕	-2.5	-9.7	+0.3	+1.2	⊕	-6.0	-17.5	-35.8	24	P2506E
0.8	3.4	7.9	14.8	21.4	-0.2	⊕	-3.2	-11.9	+0.6	+1.6	⊕	-7.2	-21.1	-43.2	24	P2506T1
0.8	3.3	7.7	14.3	23.5	-0.1	⊕	-3.8	-14.0	+0.8	+1.9	⊕	-8.2	-24.0	-48.9	24	P2506C
0.6	2.7	6.3	11.7	19.0	-0.2	⊕	-3.1	-11.6	+0.6	+1.6	⊕	-6.9	-20.1	-40.6	24	P260B
0.7	2.7	6.5	12.1	19.3	-0.1	⊕	-3.7	-13.7	+0.8	+1.9	⊕	-8.0	-23.1	-46.1	24	P260A
0.7	2.8	6.6	12.1	19.7	-0.2	⊕	-2.8	-10.7	+0.5	+1.4	⊕	-6.5	-19.0	-38.5	24	P270D
0.6	2.8	6.4	11.9	19.4	-0.3	⊕	-2.8	-10.7	+0.5	+1.4	⊕	-6.4	-18.8	-38.3	24	P270F
0.7	2.9	6.7	12.3	20.1	-0.2	⊕	-2.9	-10.9	+0.5	+1.4	⊕	-6.6	-19.2	-39.0	24	P270S1
0.7	2.8	6.4	11.8	19.0	-0.2	⊕	-3.4	-12.4	+0.7	+1.7	⊕	-7.4	-21.5	-43.1	24	P270L
0.8	3.2	7.6	14.2	23.0	-0.2	⊕	-3.3	-12.2	+0.6	+1.6	⊕	-7.3	-21.5	-43.7	24	P270T1
0.7	3.0	6.9	12.9	21.2	-0.3	⊕	-2.8	-10.6	+0.4	+1.4	⊕	-6.4	-18.9	-38.7	24	P270T3
0.6	2.5	5.8	10.7	17.3	-0.2	⊕	-3.1	-11.4	+0.6	+1.5	⊕	-6.8	-19.6	-39.5	24	P270A1
0.7	2.7	6.3	11.6	18.9	-0.2	⊕	-3.4	-12.5	+0.7	+1.7	⊕	-7.4	-21.4	-43.0	24	P270C
0.7	2.8	6.5	12.1	19.7	-0.2	⊕	-3.5	-12.6	+0.7	+1.7	⊕	-7.5	-21.6	-43.6	24	P270E
0.6	2.6	6.1	11.2	18.2	-0.3	⊕	-2.3	-9.0	+0.3	+1.1	⊕	-5.6	-16.3	-33.2	24	P270WSM1
0.6	2.5	5.8	10.7	17.3	-0.3	⊕	-2.2	-8.7	+0.2	+1.1	⊕	-5.4	-15.8	-32.2	24	P270WSMB
0.6	2.6	6.1	11.2	18.2	-0.3	⊕	-2.3	-9.0	+0.3	+1.1	⊕	-5.6	-16.3	-33.2	24	P270WSMD
0.5	2.2	5.2	9.5	15.4	-0.3	⊕	-2.4	-9.2	+0.3	+1.2	⊕	-5.6	-16.3	-32.7	24	P270WSMA1
0.6	2.4	5.7	10.4	16.9	-0.3	⊕	-2.5	-9.7	+0.3	+1.3	⊕	-5.9	-17.1	-34.5	24	P270WSMC
0.7	2.9	6.8	12.6	20.6	-0.3	⊕	-2.5	-9.8	+0.3	+1.3	⊕	-6.0	-17.7	-36.2	24	P270WSMT1
0.6	2.6	6.1	11.2	18.2	-0.3	⊕	-2.3	-9.0	+0.3	+1.1	⊕	-5.6	-16.3	-33.2	24	P270WSB1
0.8	3.1	7.4	13.7	22.5	-0.3	⊕	-2.8	-10.8	+0.4	+1.4	⊕	-6.6	-19.3	-39.6	24	P270WB1
1.6	7.2	17.7	34.5	58.1	0.0	⊕	-5.2	-19.8	+1.2	+2.6	⊕	-12.0	-37.6	-81.7	24	P730A
1.3	3.2	8.2	15.4	23.4	-0.1	⊕	-4.3	-15.4	+1.0	+2.1	⊕	-9.0	-26.1	-52.9	24	P7C
0.5	2.2	5.0	9.3	15.1	-0.3	⊕	-2.1	-8.4	+0.2	+1.1	⊕	-5.2	-15.2	-30.6	24	P7WSMB
0.6	2.4	5.6	10.3	16.7	-0.3	⊕	-2.3	-9.2	+0.3	+1.2	⊕	-5.6	-16.4	-33.1	24	P7WSM1
0.5	2.2	5.0	9.1	14.7	-0.3	⊕	-2.5	-9.6	+0.4	+1.3	⊕	-5.8	-16.9	-33.8	24	P7WSMA1
0.6	2.4	5.5	10.2	16.5	-0.3	⊕	-2.5	-9.6	+0.3	+1.2	⊕	-5.8	-17.0	-34.2	24	P7WSMC
0.7	2.9	6.7	12.4	20.3	-0.3	⊕	-2.7	-10.3	+0.4	+1.3	⊕	-6.3	-18.5	-37.6	24	P7WSMT1
0.6	2.7	6.2	11.4	18.5	-0.2	⊕	-3.0	-11.2	+0.5	+1.5	⊕	-6.7	-19.4	-39.3	24	P7WSMD
0.8	3.1	7.3	13.5	21.8	-0.2	⊕	-3.7	-13.5	+0.8	+1.8	⊕	-8.0	-23.1	-46.6	24	P708A
0.7	2.7	6.4	11.9	19.1	-0.2	⊕	-3.6	-13.1	+0.7	+1.8	⊕	-7.7	-22.3	-44.5	24	P708B
0.7	2.8	6.5	12.0	19.5	-0.2	⊕	-3.4	-12.4	+0.7	+1.7	⊕	-7.3	-21.2	-42.7	24	P708S1
0.6	2.5	5.8	10.8	17.4	-0.2	⊕	-3.0	-11.0	+0.5	+1.5	⊕	-6.6	-19.1	-38.5	24	P280D
0.6	2.6	6.1	11.2	18.2	-0.2	⊕	-2.9	-10.9	+0.5	+1.4	⊕	-6.5	-18.9	-38.2	24	P280S1
0.8	2.9	6.6	12.2	19.7	-0.2	⊕	-3.3	-12.2	+0.6	+1.7	⊕	-7.2	-21.1	-42.5	24	P280A
0.9	3.3	7.7	14.3	22.9	-0.1	⊕	-3.7	-13.7	+0.8	+1.9	⊕	-8.1	-23.5	-46.9	24	P280T3
0.6	2.6	6.0	11.1	18.2	-0.3	⊕	-2.6	-9.9	+0.4	+1.3	⊕	-6.0	-17.5	-35.6	24	P7RG
0.6	2.4	5.6	10.2	16.5	-0.3	⊕	-2.7	-10.1	+0.4	+1.3	⊕	-6.1	-17.6	-35.5	24	P7RL
0.5	2.2	5.1	9.3	15.0	-0.3	⊕	-2.6	-9.8	+0.4	+1.3	⊕	-5.9	-17.0	-34.2	24	P7RD
0.5	2.3	5.4	9.9	16.2	-0.3	⊕	-2.6	-9.9	+0.4	+1.3	⊕	-6.0	-17.4	-35.0	24	P7RH
0.6	2.5	5.9	10.9	17.7	-0.3	⊕	-2.7	-10.2	+0.4	+1.3	⊕	-6.2	-17.9	-36.2	24	P7RS1
0.7	2.7	6.3	11.7	19.0	-0.2	⊕	-3.2	-11.7	+0.6	+1.6	⊕	-7.0	-20.2	-40.8	24	P7RN

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.





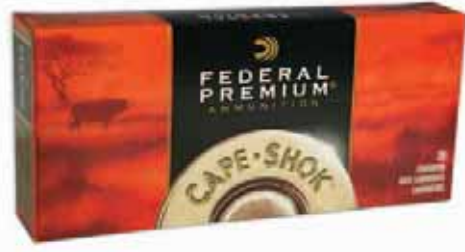
VITAL • SHOK™ CENTERFIRE RIFLE



FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN GRAINS	BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)						
					MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.
NEW	P7RF	7mm Rem. Magnum	Nosler Partition	215	2950	2770	2590	2420	2250	2090	3090	2715	2375	2075	1800	1555
◇	P7RA1	7mm Rem. Magnum	Nosler AccuBond	215	2950	2770	2600	2440	2280	2130	3090	2730	2405	2110	1850	1610
	P7RT2	7mm Rem. Magnum	Trophy Bonded Bear Claw	215	2940	2710	2500	2290	2100	1900	3070	2615	2215	1870	1565	1300
	P7RE	7mm Rem. Magnum	Sierra GameKing BTSP	215	2950	2800	2650	2510	2370	2230	3190	2865	2570	2300	2050	1825
◇	P7RT1	7mm Rem. Magnum	Trophy Bonded Bear Claw	215	2860	2640	2430	2230	2040	1860	3180	2710	2295	1935	1620	1345
◇ NEW	P7WBS1	7mm Weatherby Magnum	Nosler Solid Base BT	215	3230	3010	2800	2600	2410	2230	3465	3010	2610	2250	1940	1660
◇	P7WBT1	7mm Weatherby Magnum	Trophy Bonded Bear Claw	215	3050	2730	2420	2140	1880	1640	3305	2640	2085	1630	1255	955
NEW	P7STWS1	7mm STW	Nosler Solid Base BT	215	3180	2960	2780	2560	2370	2190	3355	2915	2525	2180	1870	1600
NEW	P7STWA1	7mm STW	Nosler AccuBond	215	3100	2920	2740	2570	2410	2250	3415	3020	2670	2350	2060	1800
	P3030D	30-30 Win.	Nosler Partition	210	2200	1900	1620	1380	1190	1060	1830	1355	990	720	535	425
	P308F	308 Win. (7.62x51mm)	Nosler Ballistic Tip	210	2820	2610	2410	2220	2040	1860	2650	2270	1935	1640	1380	1155
NEW	P308S1	308 Win. (7.62x51mm)	Nosler Solid Base BT	210	2800	2570	2350	2140	1950	1760	2610	2200	1840	1530	1260	1030
NEW	P308S	308 Win. (7.62x51mm)	Nosler Partition	210	2840	2600	2380	2170	1960	1770	2680	2255	1880	1560	1285	1050
NEW	P308V	308 Win. (7.62x51mm)	Barnes Triple Shock X-Bullet	210	2820	2610	2400	2210	2030	1850	2650	2265	1925	1630	1370	1140
NEW	P308S2	308 Win. (7.62x51mm)	Nosler Solid Base BT	210	2670	2460	2270	2080	1900	1730	2610	2225	1885	1585	1325	1100
	P308C	308 Win. (7.62x51mm)	Sierra GameKing BTSP	210	2700	2520	2330	2160	1990	1830	2670	2310	1990	1700	1450	1230
	P308T1	308 Win. (7.62x51mm)	Trophy Bonded Bear Claw	210	2700	2440	2200	1970	1760	1570	2670	2185	1775	1425	1135	900
HE	P308G	308 Win. (7.62x51mm)	Nosler Partition	210	2740	2550	2370	2200	2030	1870	3000	2600	2245	1925	1645	1395
	P308E	308 Win. (7.62x51mm)	Nosler Partition	210	2620	2430	2240	2060	1890	1730	2745	2355	2005	1700	1430	1200
	P3006P	30-06 Spring. (7.62x63mm)	Nosler Ballistic Tip	210	2910	2700	2490	2300	2110	1940	2820	2420	2070	1760	1485	1245
NEW	P3006S1	30-06 Spring. (7.62x63mm)	Nosler Solid Base BT	210	2900	2670	2440	2230	2030	1840	2800	2365	1985	1655	1370	1120
	P3006G	30-06 Spring. (7.62x63mm)	Sierra GameKing BTSP	210	2910	2690	2480	2270	2070	1880	2820	2420	2040	1710	1430	1180
NEW	P3006AD	30-06 Spring. (7.62x63mm)	Nosler Partition	210	2830	2610	2400	2190	2000	1820	2935	2490	2105	1765	1470	1215
NEW	P3006S2	30-06 Spring. (7.62x63mm)	Nosler Solid Base BT	210	2790	2580	2380	2180	2000	1830	2850	2435	2070	1745	1465	1220
◇ HE	P3006T4	30-06 Spring. (7.62x63mm)	Trophy Bonded Bear Claw	210	3000	2730	2470	2230	2000	1780	3300	2720	2230	1815	1460	1160
	P3006D	30-06 Spring. (7.62x63mm)	Sierra GameKing BTSP	210	2800	2610	2420	2240	2070	1910	2870	2490	2150	1840	1580	1340
	P3006Q	30-06 Spring. (7.62x63mm)	Nosler Ballistic Tip	210	2800	2610	2430	2250	2080	1920	2870	2495	2155	1855	1585	1350
◇	P3006T1	30-06 Spring. (7.62x63mm)	Trophy Bonded Bear Claw	210	2800	2540	2290	2050	1830	1630	2870	2360	1915	1545	1230	975
NEW	P3006A1	30-06 Spring. (7.62x63mm)	Nosler AccuBond	215	2700	2530	2360	2210	2050	1910	2915	2555	2235	1945	1685	1450
NEW	P3006S3	30-06 Spring. (7.62x63mm)	Nosler Solid Base BT	210	2710	2530	2350	2190	2020	1870	2930	2550	2210	1905	1635	1400
◇ HE	P3006T3	30-06 Spring. (7.62x63mm)	Trophy Bonded Bear Claw	210	2880	2630	2380	2160	1940	1740	3315	2755	2270	1855	1505	1210
HE	P3006R	30-06 Spring. (7.62x63mm)	Nosler Partition	210	2880	2690	2500	2320	2150	1980	3315	2880	2495	2150	1845	1570
	P3006F	30-06 Spring. (7.62x63mm)	Nosler Partition	210	2700	2500	2320	2140	1970	1810	2915	2510	2150	1830	1550	1350
◇	P3006T2	30-06 Spring. (7.62x63mm)	Trophy Bonded Bear Claw	210	2700	2460	2220	2000	1800	1610	2915	2410	1975	1605	1290	1035
NEW	P3006AE	30-06 Spring. (7.62x63mm)	Barnes Triple Shock X-Bullet	210	2700	2520	2340	2170	2000	1850	2915	2525	2180	1875	1605	1365
	P300HA	300 H&H Magnum	Nosler Partition	215	2880	2620	2380	2150	1930	1730	3315	2750	2260	1840	1480	1190
◇	P300WT4	300 Win. Magnum	Trophy Bonded Bear Claw	215	3280	2980	2700	2430	2190	1950	3570	2957	2420	1970	1590	1270
NEW	P300WS1	300 Win. Magnum	Nosler Solid Base BT	215	3140	2920	2700	2490	2300	2110	3615	3110	2665	2275	1930	1625
NEW	P300WN	300 Win. Magnum	Nosler Ballistic Tip	215	3050	2850	2650	2470	2290	2120	3410	2970	2580	2235	1925	1645
NEW	P300WK	300 Win. Magnum	Nosler Partition	215	3050	2820	2600	2380	2180	1990	3410	2905	2465	2080	1745	1450
	P300WD2	300 Win. Magnum	Nosler Partition	215	2960	2700	2450	2210	1990	1780	3500	2995	2395	1955	1585	1270
NEW	P300WA1	300 Win. Magnum	Nosler AccuBond	215	2960	2780	2600	2440	2280	2120	3500	3085	2710	2375	2070	1795
NEW	P300WS2	300 Win. Magnum	Nosler Solid Base BT	215	2970	2780	2590	2420	2250	2080	3525	3085	2685	2335	2015	1735
◇	P300WT2	300 Win. Magnum	Trophy Bonded Bear Claw	215	2960	2700	2460	2220	2000	1800	3500	2915	2410	1975	1605	1290
◇ HE	P300WT3	300 Win. Magnum	Trophy Bonded Bear Claw	215	3100	2830	2580	2340	2110	1900	3840	3205	2660	2190	1790	1445
NEW	P300WP	300 Win. Magnum	Barnes Triple Shock X-Bullet	215	2960	2760	2570	2380	2210	2040	3500	3045	2635	2270	1950	1660
◇	P300WT1	300 Win. Magnum	Trophy Bonded Bear Claw	215	2700	2550	2400	2260	2125	1990	3240	2885	2560	2270	2000	1760
HE	P300WE	300 Win. Magnum	Nosler Partition	215	2930	2700	2490	2280	2090	1900	3810	3245	2745	2310	1930	1605
	P300WSMD	300 Win. Short Magnum	Nosler Ballistic Tip	215	3200	2970	2755	2545	2345	2155	3410	2940	2520	2155	1830	1550
NEW	P300WSMS1	300 Win. Short Magnum	Nosler Solid Base BT	215	3130	2910	2690	2480	2290	2100	3590	3090	2650	2260	1915	1615
NEW	P300WSME	300 Win. Short Magnum	Nosler Partition	215	3130	2890	2670	2450	2250	2050	3590	3065	2605	2200	1850	1545
NEW	P300WSMF	300 Win. Short Magnum	Barnes Triple Shock X-Bullet	215	2980	2770	2580	2400	2220	2050	3535	3075	2665	2295	1970	1680
NEW	P300WSMS2	300 Win. Short Magnum	Nosler Solid Base BT	215	2975	2780	2560	2420	2250	2090	3535	3095	2695	2340	2025	1740
NEW	P300WSMA1	300 Win. Short Magnum	Nosler AccuBond	215	2960	2780	2610	2440	2280	2120	3500	3085	2710	2375	2070	1795
◇	P300WSMT1	300 Win. Short Magnum	Trophy Bonded Bear Claw	215	2970	2730	2500	2280	2080	1880	3525	2975	2500	2085	1725	1415
	P300WSMB	300 Win. Short Magnum	Nosler Partition	215	2975	2750	2535	2340	2195	1955	3540	3025	2570	2175	1825	1525
◇ NEW	P300WBS1	300 Weatherby Magnum	Nosler Solid Base BT	215	3110	2910	2720	2540	2370	2200	3865	3385	2960	2575	2235	1930
◇	P300WBA	300 Weatherby Magnum	Nosler Partition	215	3190	2980	2780	2590	2400	2230	4055	3540	3080	2670	2305	1985
◇	P300WBT1	300 Weatherby Magnum	Trophy Bonded Bear Claw	215	3100	2860	2640	2430	2220	2029	3840	3277	2785	2355	1975	1645
◇ NEW	P300RUMS1	300 Rem. Ultra Magnum	Nosler Solid Base BT	216	3350	3110	2890	2670	2470	2270	4110	3550	3050	2615	2230	1890
◇ NEW	P300RUMT1	300 Rem. Ultra Magnum	Trophy Bonded Bear Claw**	216	3250	3000	2770	2550	2340	2130	4220	3605	3065	2590	2180	1820
◇ NEW	P300RUMC	300 Rem. Ultra Magnum	Nosler Partition	216	3070	2870	2670	2490	2310	2140	4175	3645	3175	2750	2375	2040
◇ NEW	P338J	338 Win. Magnum	Nosler Ballistic Tip	215	3120	2860	2610	2380	2160	1950	3890	3265	2730	2265	1860	1520
	P338A2	338 Win. Magnum	Nosler Partition	215	2830	2600	2390	2180	1980	1800	3735	3160	2655	2215	1835	1505
◇ NEW	P338A1	338 Win. Magnum	Nosler AccuBond	215	2800	2630	2470	2320	2170	2030	3920	3470	3060	2690	2355	2055
HE	P338T2	338 Win. Magnum	Trophy Bonded Bear Claw	215	2940	2690	2450	2230	2010	1810	4320	3610	3000	2475	2025	1640
NEW	P338K	338 Win. Magnum	Barnes Triple Shock X-Bullet	215	2800	26										

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FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN GRAINS	GRAINS	BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)						
						MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.
◇ HE P375T3	375 H&H Magnum	300	19.44	Trophy Bonded Bear Claw	215	2600	2340	2100	1870	1660	1480	4500	3660	2940	2340	1845	1450
◇ P375F	375 H&H Magnum	300	19.44	Nosler Partition	215	2530	2320	2120	1930	1750	1590	4265	3585	2995	2475	2040	1675
◇ P375T1	375 H&H Magnum	300	19.44	Trophy Bonded Bear Claw	215	2530	2200	1970	1750	1550	1380	4000	3230	2580	2040	1605	1260
◇ P375T2	375 H&H Magnum	300	19.44	Trophy Bonded Sledgehammer	215	2530	2160	1820	1520	1280	1100	4265	3105	2210	1550	1090	810
◇ NEW P416C	416 Rigby	400	25.92	Nosler Partition	216	2440	2230	2020	1830	1650	1490	5285	4400	3635	2975	2425	1965
◇ P416T1	416 Rigby	400	25.92	Trophy Bonded Bear Claw	216	2370	2150	1940	1750	1570	1410	4990	4110	3350	2715	2190	1760
◇ P416T2	416 Rigby	400	25.92	Trophy Bonded Sledgehammer	216	2370	2120	1890	1660	1460	1290	4990	3975	3130	2440	1895	1480
◇ NEW P416RA	416 Rem Magnum	400	25.92	Nosler Partition	216	2410	2200	2000	1810	1630	1470	5160	4290	3535	2910	2355	1910
◇ P416RT1	416 Rem. Magnum	400	25.92	Trophy Bonded Bear Claw	216	2400	2180	1970	1770	1590	1420	5115	4215	3440	2785	2245	1800
◇ P416RT2	416 Rem. Magnum	400	25.92	Trophy Bonded Sledgehammer	216	2400	2150	1920	1700	1500	1330	5115	4110	3260	2565	2005	1575
◇ P458T1	458 Win. Magnum	400	25.92	Trophy Bonded Bear Claw	215	2380	2170	1960	1770	1590	1430	5030	4165	3415	2785	2255	1825
◇ P458T2	458 Win. Magnum	500	32.40	Trophy Bonded Bear Claw	215	2090	1870	1660	1480	1310	1180	4850	3870	3065	2420	1915	1550
◇ P458T3	458 Win. Magnum	500	32.40	Trophy Bonded Sledgehammer	215	2090	1860	1650	1460	1300	1170	4850	3845	3025	2365	1865	1505
◇ P470A	470 Nitro Express	500	32.40	Woodleigh Weldcore SP	216	2150	1890	1650	1440	1270	1140	5130	3965	3040	2310	1790	1435
◇ P470B	470 Nitro Express	500	32.40	Woodleigh Solid	216	2150	1890	1650	1440	1270	1140	5130	3965	3040	2310	1790	1435
◇ P470T1	470 Nitro Express	500	32.40	Trophy Bonded Bear Claw	216	2150	1940	1740	1560	1400	1260	5130	4170	3360	2695	2160	1750
◇ P470T2	470 Nitro Express	500	32.40	Trophy Bonded Sledgehammer	216	2150	1940	1740	1560	1400	1260	5130	4170	3360	2695	2160	1750

HE = High Energy (NOT recommended for semi-automatic rifles) SP = Soft Point ◇ = Nickel Plated Case Partition is a registered trademark of Nosler Bullets, Inc. Bear Claw and Sledgehammer, are registered trademarks of Trophy Bonded Bullets, Inc. Woodleigh Weldcore is a trademark of Woodleigh.

Premium[®] V•Shok™

Lightning Fast, Deadly Accurate



V • SHOK™ CENTERFIRE RIFLE



FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN GRAINS	GRAINS	BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)						
						MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.
NEW P222C	222 Rem. (5.56x43mm)	40	2.59	Nosler Ballistic Tip	205	3450	3000	2570	2190	1840	1530	1055	790	585	425	300	210
NEW P223P	223 Rem. (5.56x45mm)	40	2.59	Nosler Ballistic Tip	205	3700	3210	2770	2370	2010	1680	1215	915	680	500	360	250
P223E	223 Rem. (5.56x45mm)	55	3.56	Sierra GameKing BTHP	205	3240	2770	2340	1950	1610	1330	1280	935	670	465	315	215
P223F	223 Rem. (5.56x45mm)	55	3.56	Nosler Ballistic Tip	205	3240	2870	2530	2220	1920	1660	1280	1005	780	600	450	335
P2225OV	22-250 Rem.	40	2.59	Sierra Varminter HP	210	4000	3320	2720	2200	1740	1360	1420	980	660	430	265	165
P2225OB	22-250 Rem.	55	3.56	Sierra GameKing BTHP	210	3680	3280	2920	2590	2280	1990	1655	1315	1040	815	630	480
NEW P2225OF	22-250 Rem.	55	3.56	Nosler Ballistic Tip	210	3680	3270	2900	2560	2240	1940	1655	1305	1025	800	615	460
NEW P220B	220 Swift	40	2.59	Nosler Ballistic Tip	210	4250	3690	3200	2770	2370	2000	1605	1210	910	680	500	355
P220V	220 Swift	52	3.37	Sierra MatchKing BTHP	210	3830	3370	2960	2600	2230	1910	1690	1310	1010	770	575	420
NEW P243H	243 Win. (6.16x51mm)	55	3.56	Nosler Ballistic Tip	210	3850	3430	3040	2690	2360	2060	1810	1435	1130	880	680	515
P243F	243 Win. (6.16x51mm)	70	4.54	Nosler Ballistic Tip	210	3400	3070	2760	2470	2200	1950	1795	1465	1185	950	755	590
NEW P2506G	25-06 Rem.	85	5.51	Nosler Ballistic Tip	210	3550	3230	2930	2640	2380	2130	2380	1965	1615	1320	1070	855
P2506V	25-06 Rem.	90	5.83	Sierra Varminter HP	210	3440	3040	2680	2340	2030	1750	2365	1850	1435	1100	825	610

BTHP = Boat-Tail Hollow Point HP = Hollow Point Ballistic Tip is a registered trademark of Nosler Bullets, Inc. GameKing, MatchKing and Varminter are registered trademarks of Sierra Bullets, Inc. Additional offerings available in Vital•Shok™ on pages 6-9.

Centerfire Rifle



Those who hunt dangerous game know how important it is to carry the absolute best ammunition for the job—that's why safari and dangerous game hunters choose Federal Premium Cape•Shok. Available with your choice of the finest bullets made, from Speer® Trophy Bonded Bear Claw® and Sledgehammer®, to Nosler Partition®, Woodleigh® Weldcore and Solid, each cartridge is nickel-plated for better feeding, ejection and corrosion resistance. Because it's the number one choice of Safari Club International members, there's no reason to trust anything less than Federal Premium on your next hunt.



WIND DRIFT IN INCHES TO MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT ⊕ YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE										TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.
100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.		
1.1	4.6	10.9	20.5	33.9	0.0	⊕	-4.9	-17.6	+1.2	+2.4	⊕	-10.3	-30.6	-63.5	24	P375T3
0.9	3.9	9.1	17.0	27.8	0.0	⊕	-5.0	-17.7	+1.2	+2.5	⊕	-10.3	-29.9	-60.8	24	P375F
1.2	5.0	11.9	22.4	37.0	-0.1	⊕	-5.7	-20.4	+1.5	+2.9	⊕	-11.9	-35.1	-72.9	24	P375T1
1.7	7.4	18.3	35.4	59.1	⊕	-0.1	-6.2	-23.0	+0.1	⊕	-6.0	-22.7	-54.6	-108.4	24	P375T2
1.0	4.3	10.1	18.8	30.8	⊕	-0.1	-5.7	-19.9	0.0	⊕	-5.6	-19.6	-44.1	-81.3	24	P416C
1.2	4.6	11.1	20.8	33.9	⊕	-0.2	-6.4	-21.9	+0.1	⊕	-6.0	-21.3	-48.1	-88.8	24	P416T1
1.3	5.5	13.2	24.8	41.0	⊕	-0.2	-6.8	-23.2	+0.1	⊕	-6.3	-22.5	-51.5	-96.7	24	P416T2
1.0	4.3	10.3	19.1	31.4	⊕	-0.1	-6.0	-20.1	+0.1	⊕	-5.7	-19.7	-45.4	-83.7	24	P416RA
1.2	4.6	10.9	20.6	33.5	⊕	-0.2	-6.2	-21.2	+0.1	⊕	-5.8	-20.6	-46.9	-86.5	24	P416RT1
1.3	5.2	12.6	23.6	39.0	⊕	-0.2	-6.4	-22.2	+0.1	⊕	-6.0	-21.6	-49.2	-92.6	24	P416RT2
1.1	4.5	10.7	19.9	32.7	⊕	-0.2	-6.3	-21.5	+0.1	⊕	-5.9	-20.9	-47.1	-87.0	24	P458T1
1.5	6.2	14.6	27.3	44.5	⊕	-0.7	-10.0	-31.8	+0.4	⊕	-8.5	-29.7	-66.8	-124.2	24	P458T2
1.5	6.4	15.2	28.3	46.1	⊕	-0.7	-10.1	-32.2	+0.4	⊕	-8.6	-30.0	-67.8	-126.3	24	P458T3
1.6	7.0	16.6	31.1	50.6	⊕	-1.6	-12.6	-36.2	+0.8	⊕	-9.3	-31.3	-69.7	-128.6	24	P470A
1.6	7.0	16.6	31.1	50.6	⊕	-1.6	-12.6	-36.2	+0.8	⊕	-9.3	-31.3	-69.7	-128.6	24	P470B
1.3	5.5	13.0	24.3	39.7	⊕	-0.6	-9.0	-28.9	+0.3	⊕	-7.8	-27.1	-60.8	-112.4	24	P470T1
1.3	5.5	13.0	24.3	39.7	⊕	-0.6	-9.0	-28.9	+0.3	⊕	-7.8	-27.1	-60.8	-112.4	24	P470T2

Nothing performs better on varmints than Federal's V•Shok ammunition. Sizzling velocity and explosive disruption make it the ultimate choice for your favorite varmint. V•Shok is available in your favorite prairie doggin' calibers and features the best bullets available for any varmint; from Nosler® Ballistic Tip® to Sierra® GameKing®, MatchKing® and Varminter®. Take V•Shok along for the hunt—you'll be glad you did.



WIND DRIFT IN INCHES TO MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT ⊕ YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE										TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.
100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.		
1.2	4.9	11.9	22.9	39.1	-0.3	⊕	-2.4	-10.2	+0.3	+1.2	⊕	-6.5	-20.4	-44.7	24	P222C
1.1	4.5	10.8	20.8	35.3	-0.4	⊕	-1.9	-8.4	+0.1	+1.0	⊕	-5.5	-17.3	-37.8	24	P223P
1.3	5.8	14.2	27.7	47.6	-0.3	⊕	-2.7	-10.8	+0.4	+1.5	⊕	-8.0	-25.3	-56.6	24	P223E
1.0	4.3	10.3	19.6	32.9	-0.3	⊕	-2.7	-10.9	+0.4	+1.4	⊕	-6.8	-20.8	-44.2	24	P223F
1.3	5.7	14.0	27.9	49.2	-0.4	⊕	-1.7	-8.1	0.0	+0.8	⊕	-5.6	-18.4	-42.8	24	P22250V
0.8	3.6	8.4	15.8	26.3	-0.4	⊕	-1.7	-7.6	0.0	+0.9	⊕	-5.0	-15.1	-32.0	24	P22250B
0.9	3.7	8.7	16.4	27.4	-0.4	⊕	-1.8	-7.7	+0.1	+0.9	⊕	-5.0	-15.4	-32.8	24	P22250F
0.9	3.8	9.2	17.4	29.2	-0.5	⊕	-1.1	-5.5	0.0	+0.5	⊕	-3.9	-12.5	-27.3	24	P220B
0.9	3.9	9.2	17.4	29.1	-0.4	⊕	-1.6	-7.2	0.0	+0.8	⊕	-4.8	-14.9	-31.9	24	P220V
0.8	3.5	8.2	15.5	25.7	-0.4	⊕	-1.5	-6.7	0.0	+0.7	⊕	-4.5	-13.9	-29.5	24	P243H
0.8	3.3	7.7	14.5	23.6	-0.3	⊕	-2.9	-10.9	+0.5	+1.4	⊕	-6.6	-19.7	-40.4	24	P243F
0.7	3.1	7.2	13.3	21.9	-0.4	⊕	-1.9	-7.8	+0.1	+0.9	⊕	-5.0	-15.0	-31.2	24	P2506G
0.6	2.7	6.2	11.4	18.7	-0.3	⊕	-2.4	-9.4	+0.3	+1.2	⊕	-5.8	-17.0	-34.8	24	P2506V

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.

GAME GUIDE



VARMINT: Designed for immediate expansion with instant energy transfer. Suitable for coyote, fox, prairie dog, woodchuck and other small varmints/predators.



MEDIUM GAME: Designed for maximum effectiveness on light, thin-skinned game such as antelope, mule deer, white-tailed deer and black bear.



BIG GAME: Designed for maximum effectiveness on bigger animals with thick skin, heavy muscle tissue and bone such as elk, moose and brown bear.



DANGEROUS GAME: Designed for maximum effectiveness on large game with tough hide, heavy bone and muscle tissue such as cape buffalo and elephant.

Please use this as a basic guide. No one bullet is ideal for all game. Penetration, expansion, weight retention and range have to be evaluated and selected based on what and where you hunt.

No one knows better than you how your rifle shoots and what you're comfortable with in the field. That's why you spend countless hours at the range fine-tuning before game time. As you might imagine, we've done the same thing by testing loads over and over again in our ballistics lab and in the field. Based on the extensive research we've conducted on all of our centerfire rifle loads, we've come up with

an "at-a-glance" method for quickly identifying which ammunition is best suited for your favorite pursuit. When you look over the ammunition shelf at your local dealer this year, you'll pick up on our new system and how it jumps off the shelf. And if you're not the fine-tuning type, our helpful Game Guide will be a great resource for you to determine your trophy combination.



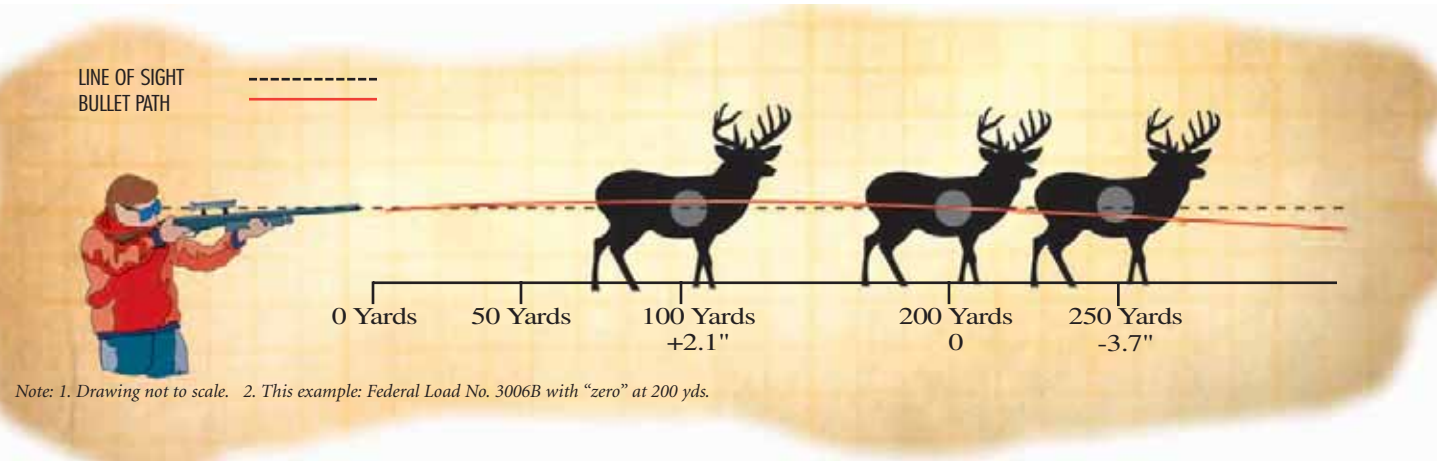
Photos courtesy of Winterhawk Outfitters

SIGHTING IN A RIFLE

The process of “sighting in” or “zeroing” consists of making the rifle and its sight “agree” about where the bullets strike. With proper procedures, sighting in is neither mysterious nor difficult.

1. Your rifle and its sight should be in good condition and properly assembled. Check action screws and scope mounts. Bore sighting or the use of a collimator is not a substitute for actually sighting in by shooting on a range.
2. Select ammunition for its intended purpose. Be sure to start with enough ammunition to complete the sighting-in process and also to use in the field.
3. Pick a safe area to shoot with an adequate backstop to stop your bullets. Wear shooting glasses and hearing protection.
4. Shoot from a solid rest, such as a benchrest or sand bags. Shoot at close range to get “on paper” but verify the final zero at expected hunting ranges.
5. From the solid rest, carefully squeeze off three aimed shots. The center of this group of bullet holes is the rifle’s point of impact. Adjusting the sight moves this point of impact to your desired zero. Move open rear sights in the same direction you want the group to move. Adjust scopes following directions on the dials. Continue this process until the group is where you want it. (Do not adjust sights on the basis of single shots. An “odd shot” can lead to sight adjustment errors and ultimately wastes ammunition.)
6. Different ammunition brands and/or bullet weights may change the point of impact and necessitate re-sighting. If your rifle gets bumped or dropped, be sure to re-verify your zero so you can bag your game with one shot.

Trajectory



“Trajectory” is the arc of the bullet from the firearm’s muzzle. Bullets appear to “rise” because the barrel is angled up. The bullet’s path crosses the line of sight twice – going up near the muzzle and going down through the downrange zero. The mid-range trajectory is the bullet’s highest point

above the line of sight. It usually occurs halfway between the muzzle and the zero range. Velocity and bullet design determine trajectory. Low-velocity cartridges with round-nosed bullets, if sighted for long ranges, will have a very high mid-range trajectory possibly high enough to

cause a miss on close-range targets. For big game hunting, a trajectory height of 3-4 inches is considered acceptable. For small varmints, about 2 inches is maximum. Consult Federal’s ballistic tables for velocity, trajectory and appropriate downrange zero for your specific cartridge/bullet.

Premium® Gold Medal® Centerfire Rifle

The Best Won't Settle for Less



New Look available mid-year 2004.

G O L D M E D A L® C E N T E R F I R E R I F L E

FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN		BULLET STYLE	FACTORY PRIMER NO.	MUZZLE	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)				
		GRAINS	GRAMS				100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.
GM223M	223 Rem. (5.56x45mm)	69	4.47	Sierra MatchKing BTHP	GM205M	3000	2720	2460	2210	1980	1760
GM223M3	223 Rem. (5.56x45mm)	77	5.00	Sierra MatchKing BTHP	GM205M	2750	2500	2270	2050	1840	1650
GM308M3	308 Win. (7.62x51mm) Palma	155	10.04	Sierra MatchKing BTHP	GM210M	2950	2740	2540	2350	2170	2000
GM308M	308 Win. (7.62x51mm)	168	10.88	Sierra MatchKing BTHP	GM210M	2600	2410	2230	2060	1890	1740
GM308M2	308 Win. (7.62x51mm)	175	11.34	Sierra MatchKing BTHP	GM210M	2600	2420	2260	2090	1940	1790
GM3006M	30-06 Spring. (7.62x63mm)	168	10.88	Sierra MatchKing BTHP	GM210M	2700	2510	2320	2150	1980	1820
GM300WM	300 Win. Magnum	190	12.31	Sierra MatchKing BTHP	GM215M	2900	2730	2560	2400	2240	2090

BTHP = Boat-Tail Hollow Point Palma Load in 30" barrel MatchKing is a registered trademark of Sierra Bullets, Inc.

American Eagle® Centerfire Rifle

An Industry Mainstay

A M E R I C A N E A G L E® C E N T E R F I R E R I F L E

FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)						
		GRAINS	GRAMS			MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	MUZZLE	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.
AE223G	223 Rem. (5.56x45mm)	50	3.24	Jacketed Hollow Point	205	3400	2910	2460	2060	1700	1390	1285	940	675	470	320	215
AE223	223 Rem. (5.56x45mm)	55	3.56	Full Metal Jacket Boat-Tail	205	3240	2950	2670	2410	2170	1940	1280	1060	875	710	575	460
AE223N	223 Rem. (5.56x45mm)	62	4.02	Full Metal Jacket Boat-Tail	205	3020	2650	2310	2000	1710	1460	1225	870	735	550	405	280
AE30CB	30 Carbine	110	7.13	Full Metal Jacket	205	1990	1570	1240	1040	920	840	965	600	375	260	210	175
A76239A	7.62x39mm Soviet	124	8.03	Full Metal Jacket	210	2300	2030	1780	1560	1360	1200	1455	1135	875	670	510	400
AE308D	308 Win. (7.62x51mm)	150	9.72	Full Metal Jacket Boat-Tail	210	2820	2620	2430	2250	2070	1900	2650	2285	1965	1680	1430	1205
AE3006N	30-06 Spring. (7.62x63mm)	150	9.72	Full Metal Jacket Boat-Tail	210	2910	2710	2510	2320	2150	1970	2820	2440	2100	1800	1535	1300

Sure, Federal is all about new products and technological leadership, but why change a product that is as world-renowned as our line of Gold Medal rifle cartridges. These heralded loads combine the legendary Sierra MatchKing Boat-Tail bullet with Federal's proprietary delivery system. Stringent manufacturing controls give you what many experts and international shooters consider the most accurate match round available from a factory. World-class competitors, as well as military and law enforcement officials, choose Gold Medal when it counts the most.



"Extreme accuracy" is the only way to describe the performance of the Gold Medal 308. The target shows 10 shots fired at 200 yards.

MUZZLE	ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					WIND DRIFT IN INCHES 10 MPH CROSSWIND					HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 0 YARDS, SIGHTS 1.5 INCHES ABOVE BORE LINE.					TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.
	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.			
1380	1135	925	750	600	475	0.9	3.7	8.7	16.3	27.0	-0.2	⊕	-3.2	-12.3	24	GM223M	
1295	1070	880	715	580	465	0.9	3.9	9.2	17.2	28.4	-0.1	⊕	-4.1	-14.9	24	GM223M3	
2520	2170	1855	1580	1340	1130	0.7	3.2	7.6	13.8	22.8	-0.1	⊕	-4.5	-15.9	24	GM308M3	
2625	2285	1975	1705	1460	1245	0.6	3.0	7.0	12.7	20.8	-0.1	⊕	-4.4	-15.7	24	GM308M	
2995	2585	2225	1905	1620	1370	0.7	2.8	6.4	12.0	19.5	-0.2	⊕	-3.1	-11.6	30	GM308M2	
2720	2350	2010	1720	1460	1230	0.7	3.0	7.2	13.2	21.4	-0.1	⊕	-4.0	-14.5	24	GM3006M	
3550	3135	2760	2420	2115	1840	0.6	2.4	5.5	10.1	16.4	-0.2	⊕	-3.2	-11.6	24	GM300WM	



hitting the range this weekend? Take along several boxes of your favorite American Eagle load. You'll find our American Eagle Centerfire Rifle choices very suitable for precision practice and an affordable option for the target board. Available in contemporary calibers and a couple of classics, you'll enjoy the accuracy you'll see with AE rifle loads—they'll make sure you're ready when competition time comes.

100 YDS.	WIND DRIFT IN INCHES 10 MPH CROSSWIND				HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 0 YARDS, SIGHTS 1.5 INCHES ABOVE BORE LINE					TEST BARREL LENGTH INCHES	FEDERAL LOAD NO.					
	200 YDS.	300 YDS.	400 YDS.	500 YDS.	50 YDS.	100 YDS.	200 YDS.	300 YDS.	400 YDS.			500 YDS.				
0.8	3.3	7.8	14.5	24.0	-0.3	⊕	-2.5	-9.9	+0.3	+1.3	⊕	-6.1	-18.3	-37.8	24	AE223G
1.3	5.5	13.4	26.1	44.9	-0.3	⊕	-2.7	-11.1	+0.4	+1.3	⊕	-7.1	-22.7	-50.7	24	AE223
1.2	5.0	12.2	23.3	38.2	-0.2	⊕	-3.5	-13.5	+0.7	+1.7	⊕	-8.4	-25.5	-54.7	24	AE223N
3.4	15.0	35.5	63.2	96.7	+0.6	⊕	-12.8	-46.9	+3.9	+6.4	⊕	-27.7	-81.8	-167.8	18	AE30CB
1.5	6.2	15.1	28.3	46.8	+0.2	⊕	-6.9	-25.0	+1.9	+3.5	⊕	-14.6	-43.5	-91.5	20	A76239A
0.8	2.9	6.8	12.6	20.3	-0.2	⊕	-3.5	-13.0	+0.7	+1.8	⊕	-7.7	-22.4	-44.9	24	AE308D
0.7	2.8	6.5	12.1	19.5	-0.2	⊕	-3.2	-12.0	+0.6	+1.6	⊕	-7.1	-20.8	-41.9	24	AE3006N

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.



New Look available mid-year 2004.



Hydra-Shok® Expanding Full Metal Jacket CastCore™

Premium® Personal Defense® Handgun

The Ultimate In Personal Defense

PERSONAL DEFENSE® HANDGUN

When you're in need of an outstanding personal defense round, you'll find Federal Premium handgun loads are the best around. Hydra-Shok® is the first choice for many military and law enforcement officials across the globe, while Expanding Full Metal Jacket (EFMJ) is unmatched in non-hollow point technology. EFMJ provides higher energy, more reliable expansion, lower risk of collateral damage and reduced recoil—vitaly important features for a personal defense round.

FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					MID-RANGE TRAJECTORY				TEST BARREL LENGTH INCHES
		GRAINS	GRAMS			MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
P32HS1	32 Auto (7.65mm Browning)	65	4.21	Hydra-Shok JHP	100	950	920	890	860	830	130	120	115	105	100	0.3	1.3	3.0	5.6	4
P9HS1	9mm Luger (9x19mm Parabellum)	124	8.03	Hydra-Shok JHP	200	1120	1070	1030	990	960	345	315	290	270	255	0.2	0.9	2.2	4.1	4
P9HS2	9mm Luger (9x19mm Parabellum)	147	9.52	Hydra-Shok JHP	200	1000	960	920	890	860	325	300	275	260	240	0.3	1.2	2.8	5.1	4
P357S1	357 Sig	125	8.10	JHP	200	1350	1270	1190	1130	1080	510	445	395	355	325	0.2	0.7	1.6	3.1	4
P38HS1	38 Special (High Velocity +P)	129	8.36	Hydra-Shok JHP	100	950	930	910	890	870	255	245	235	225	215	0.3	1.3	2.9	5.3	4-V
P357HS1	357 Magnum	158	10.23	Hydra-Shok JHP	100	1240	1160	1100	1060	1020	535	475	430	395	365	0.2	0.8	1.9	3.5	4-V
P40HS2	40 S&W	155	10.04	Hydra-Shok JHP	100	1140	1080	1030	990	950	445	400	365	335	315	0.2	0.9	2.2	4.1	4
P40HS3	40 S&W	165	10.66	Hydra-Shok JHP	100	980	950	930	910	890	350	330	315	300	290	0.3	1.2	2.7	5.1	4
P40HS1	40 S&W	180	11.66	Hydra-Shok JHP	100	990	960	930	910	890	390	365	345	330	315	0.3	1.2	2.8	5.0	4
P10HS1	10mm Auto	180	11.66	Hydra-Shok JHP	150	1030	1000	970	950	920	425	400	375	355	340	0.3	1.1	2.5	4.7	5
P44HS1	44 Rem. Magnum	240	15.55	Hydra-Shok JHP	150	1180	1130	1080	1050	1010	740	675	625	580	550	0.2	0.9	2.0	3.7	6 1/2-V
P45HS1	45 Auto	230	14.90	Hydra-Shok JHP	150	850	830	810	790	770	370	350	335	320	305	0.4	1.6	3.6	6.6	5
LOW RECOIL																				
PD380HS1 H	380 Auto (9x17mm Short)	90	5.83	Hydra-Shok JHP	100	1000	940	890	840	800	200	175	160	140	130	0.3	1.2	2.9	5.5	3 1/4
PD9CSP2 H	9mm Luger (9x19mm Parabellum)	105	6.80	EFMJ	200	1225	1160	1105	1060	1025	350	315	285	265	245	0.1	1.0	2.2	4.2	4
PD9HS5 H	9mm Luger (9x19mm Parabellum)	135	8.75	Hydra-Shok JHP	200	1050	1030	1010	980	970	330	315	300	290	280	0.4	1.2	2.4	4.3	4
PD38HS3 H	38 Special	110	7.10	Hydra-Shok JHP	100	1000	970	930	910	880	245	225	215	200	190	0.3	1.2	2.7	5.0	4-V
PD357HS2 H	357 Magnum	130	8.42	Hydra-Shok JHP	100	1300	1210	1130	1070	1020	490	420	370	330	300	0.2	0.7	1.8	3.4	4-V
PD40HS4 H	40 S&W	135	8.75	Hydra-Shok JHP	100	1190	1050	970	900	850	420	330	280	245	215	0.2	1.0	2.4	4.6	4
PD40CSP2 H	40 S&W	135	8.75	EFMJ	100	1190	1060	970	905	850	425	335	280	245	215	0.2	1.0	2.4	4.6	4
PD45G1 H	45 G.A.P.	185	11.99	Hydra-Shok JHP	150	1090	1020	970	920	890	490	430	385	350	320	0	1	2.5	4.7	5
PD45HS3 H	45 Auto	165	10.66	Hydra-Shok JHP	150	1060	1020	980	950	920	410	375	350	330	310	0.2	1.1	2.5	4.5	5
PD45CSP2 H	45 Auto	165	10.69	EFMJ	150	1090	1045	1005	975	942	435	400	370	345	325	0.3	1.0	2.4	4.4	5

+ P ammunition is loaded to a higher pressure. Use only in firearms recommended by the gun manufacturer. *JHP = Jacketed Hollow Point "V" indicates vented barrel to simulate service conditions. EFMJ = Expanding Full Metal Jacket
 Look for the Low Recoil logo on select products for a softer shooting load.

Premium® Vital•Shok™ Handgun Hunting

To Stop Them In Their Tracks

VITAL•SHOK™ HANDGUN

Proven CastCore® bullet technology provides you with the performance you need when taking big game. Premium CastCore gives you a heavy weight, flat-nosed, hard-cast lead bullet that smashes through bone without breaking apart.



New Look available mid-year 2004.

FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					MID-RANGE TRAJECTORY				TEST BARREL LENGTH INCHES
		GRAINS	GRAMS			MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
P357J	357 Magnum	180	11.66	CastCore	100	1250	1200	1160	1120	1080	625	575	535	495	465	0.5	1.1	0.0	-2.8	4-V
P41B	41 Rem. Magnum	250	16.20	CastCore	150	1250	1200	1150	1110	1080	865	795	735	685	645	0.6	1.1	0.0	-2.9	6 1/2-V
P44E	44 Rem. Magnum	300	19.44	CastCore	150	1250	1200	1160	1120	1080	1040	960	885	825	775	0.5	1.1	0.0	-2.8	6 1/2-V

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.



Premium® Gold Medal® Match Pistol For The True Competitor



New Look available mid-year 2004.

For the real competition shooter, there is no better choice than Federal Premium Gold Medal Match ammunition. Our Lead Wadcutter, Full Metal Jacket and Full Metal Jacket Semi-Wadcutter Match bullets are unequalled in match-grade performance. Choose from our .38 Special and two .45 Auto pistol products to seal your victory.

G O L D M E D A L ® H A N D G U N

FEDERAL LOAD NO.	CALIBER	BULLET GRAINS	WGT. IN GRAMS	BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					MID-RANGE TRAJECTORY					TEST BARREL LENGTH INCHES
						MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.		
GM38A	38 Special	148	9.59	Lead Wadcutter Match	GM100M	710	670	630	600	560	165	150	130	115	105	0.6	2.4	5.7	10.8	4-V	
GM45A	45 Auto	230	14.90	FMJ Match	GM150M	860	840	820	800	780	375	355	340	325	305	0.4	1.6	3.7	6.7	5	
GM45B	45 Auto	185	11.99	FMJ-SWC Match	GM150M	780	730	700	660	620	245	220	200	175	160	0.5	2.0	4.8	9.0	5	

FMJ = Full Metal Jacket SWC = Semi-Wadcutter "V" indicates vented barrel to simulate service conditions.

Champion® Target For The Shooting Enthusiast

Time at the range goes fast. If you love to shoot, our Champion target loads are the answer. We offer a good selection of great bullets for target practice.



New Look available mid-year 2004.

C H A M P I O N ® H A N D G U N

FEDERAL LOAD NO.	CALIBER	BULLET GRAINS	WGT. IN GRAMS	BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					MID-RANGE TRAJECTORY					TEST BARREL LENGTH INCHES
						MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.		
C32LA	32 S&W Long	98	6.35	Lead Wadcutter	100	780	700	630	560	500	130	105	85	70	55	0.5	2.2	5.6	11.1	4-V	
C32LB	32 S&W Long	98	6.35	Lead Round Nose	100	710	690	670	650	640	115	105	100	95	90	0.6	2.3	5.3	9.6	4-V	
C32HRA	32 H&R Magnum	95	6.15	Lead Semi-Wadcutter	100	1030	1000	940	930	900	225	210	195	185	170	0.3	1.1	2.5	4.7	4½-V	
C44SA	44 S&W Special	200	12.96	Semi-Wadcutter HP	150	900	860	830	800	770	360	330	305	285	260	0.3	1.4	3.4	6.3	6½-V	
C45LCA	45 Colt	225	14.58	Semi-Wadcutter HP	150	900	880	860	840	820	405	385	370	355	340	0.3	1.4	3.2	5.8	5½-V	

HP = Hollow Point "V" indicates vented barrel simulate service conditions.

Power•Shok™ Handgun Hunting Gets The Job Done

For the cost-conscious handgun hunter, several hot calibers are available in our performance-driven Jacketed Hollow Point loads. Keep the cost down and retain performance with Power•Shok.



New Look available mid-year 2004.

P O W E R • S H O K ™ H A N D G U N

FEDERAL LOAD NO.	CALIBER	BULLET GRAINS	WGT. IN GRAMS	BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					MID-RANGE TRAJECTORY					TEST BARREL LENGTH INCHES
						MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.		
C357G	357 Magnum	180	11.66	JHP	100	1090	1030	980	930	890	475	425	385	350	320	0.2	1.0	2.4	4.5	4-V	
C41A	41 Rem. Magnum	210	13.60	JHP	150	1300	1210	1130	1070	1030	790	680	595	540	495	0.2	0.7	1.8	3.3	6½-V	
C44B	44 Rem. Magnum	180	11.66	JHP	150	1610	1480	1370	1270	1180	1035	875	750	640	555	0.1	0.5	1.2	2.3	6½-V	
C44A	44 Rem. Magnum	240	15.55	JHP	150	1180	1130	1080	1050	1010	740	675	625	580	550	0.2	0.9	2.0	3.7	6½-V	

JHP = Jacketed Hollow Point "V" indicates vented barrel simulate service conditions.

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.

Personal Defense®

New Look available mid-year 2004.



P E R S O N A L D E F E N S E ® H A N D G U N

FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN GRAINS GRAMS		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					MID-RANGE TRAJECTORY				TEST BARREL LENGTH INCHES
						MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
REVOLVER																				
C32HRB	32 H&R Magnum	85	5.50	JHP	100	1100	1050	1020	970	930	230	210	195	175	165	0.2	1.0	2.3	4.3	4½-V
C38E	38 Special (High-Velocity+P)	125	8.10	JHP	100	950	920	900	880	860	250	235	225	215	205	0.3	1.3	2.9	5.4	4-V
C357B	357 Magnum	125	8.10	JHP	100	1450	1350	1240	1160	1100	580	495	430	370	335	0.1	0.6	1.5	2.8	4-V
C357F	357 Magnum	158	10.23	JHP	100	1240	1160	1100	1060	1020	535	475	430	395	365	0.2	0.8	1.9	3.5	4-V
AUTOMATIC PISTOL																				
C380BP	380 Auto (9x17mm Short)	90	5.83	JHP	100	1000	940	890	840	800	200	175	160	140	130	0.3	1.2	2.9	5.5	3¾
C9BP	9mm Luger (9x19mm Parabellum)	115	7.45	JHP	200	1160	1100	1060	1020	990	345	310	285	270	250	0.2	0.9	2.1	3.8	4
C9MS	9mm Luger (9x19mm Parabellum)	147	9.52	JHP	200	980	950	930	900	880	310	295	285	265	255	0.3	1.2	2.8	5.1	4
C40SWB	40 S&W	155	10.04	JHP	100	1140	1080	1030	990	950	445	400	365	335	315	0.2	0.9	2.2	4.1	4
C40SWA	40 S&W	180	11.66	JHP	100	990	960	930	910	890	390	365	345	330	315	0.3	1.2	2.8	5.0	4
C10C	10mm Auto	180	11.66	JHP	150	1030	1000	970	950	920	425	400	375	355	340	0.3	1.1	2.5	4.7	5
C45C	45 Auto	185	11.99	JHP	150	950	920	900	880	860	370	350	335	315	300	0.3	1.3	2.9	5.3	5
C45D	45 Auto	230	14.90	JHP	150	850	830	810	790	770	370	350	335	320	300	0.4	1.6	3.7	6.7	5

+ P ammunition is loaded to a higher pressure. Use only in firearms recommended by the gun manufacturer. JHP = Jacketed Hollow Point

American Eagle® Handgun

Maximum Fun at Minimum Cost



A M E R I C A N E A G L E ® I R T ® H A N D G U N

FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN GRAINS GRAMS		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					MID-RANGE TRAJECTORY				TEST BARREL LENGTH INCHES
						MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
AE9N1	9mm Luger (9 x 19 Parabellum)	124	8.04	TMJ	205TMF	1120	1070	1030	990	960	345	315	290	270	255	0.2	1.0	2.2	4.1	4
AE9N2	9mm Luger (9 x 19 Parabellum)	147	9.53	TMJ	205TMF	960	940	910	890	870	300	285	270	260	245	0.3	1.3	2.9	5.3	4
AE40N1	40 S&W	180	11.66	TMJ	205TMF	990	960	940	910	890	390	370	350	330	315	0.3	1.2	2.7	5.0	4
AE45N1	45 Auto	230	14.90	TMJ	205TMF	850	830	810	790	770	370	350	335	315	305	0.4	1.6	3.7	6.7	5

TMJ = Total Metal Jacket TMF = Toxic Metal Free IRT = Indoor Range Training



A M E R I C A N E A G L E ® H A N D G U N

FEDERAL LOAD NO.	CALIBER	BULLET WGT. IN GRAINS GRAMS		BULLET STYLE	FACTORY PRIMER NO.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					MID-RANGE TRAJECTORY				TEST BARREL LENGTH INCHES
						MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
REVOLVER																				
AE38K	38 Special	130	8.43	Full Metal Jacket	100	950	920	890	870	840	260	245	230	215	205	0.3	1.3	3.0	5.5	4-V
AE38B	38 Special	158	10.23	Lead Round Nose	100	760	740	720	710	690	200	190	185	175	170	0.5	2.0	4.6	8.3	4-V
AE357A	357 Magnum	158	10.23	Jacketed Soft Point	100	1240	1160	1100	1060	1020	535	475	430	395	365	0.2	0.8	1.0	3.5	4-V
AE44A	44 Rem. Magnum	240	15.55	Jacketed Hollow Point	150	1180	1130	1080	1050	1010	740	675	625	580	550	0.2	0.9	2.0	3.7	6½-V
AUTOMATIC PISTOL																				
AE25AP	25 Auto (6.35mm Browning)	50	3.24	Full Metal Jacket	200	760	750	730	720	700	65	60	60	60	55	0.5	1.9	4.5	8.1	2
AE32AP	32 Auto (7.65mm Browning)	71	4.60	Full Metal Jacket	100	910	880	860	830	810	130	120	115	110	105	0.3	1.4	3.2	5.9	4
AE380AP	380 Auto (9 x 17 short)	95	6.15	Full Metal Jacket	100	960	910	870	830	790	190	175	160	145	130	0.3	1.3	3.1	5.8	3¾
AE9MK	9mm Makarov (9 x 18 Makarov)	95	6.15	Full Metal Jacket	100	990	960	920	900	870	205	190	180	170	160	0.3	1.2	2.8	5.1	3¾
AE9DP	9mm Luger (9 x 19 Parabellum)	115	7.45	Full Metal Jacket	200	1160	1100	1060	1020	990	345	310	285	270	250	0.2	0.9	2.1	3.9	4
AE9AP	9mm Luger (9 x 19 Parabellum)	124	8.03	Full Metal Jacket	200	1120	1070	1030	990	960	345	315	290	270	255	0.2	0.9	2.2	4.1	4
AE9FP	9mm Luger (9 x 19 Parabellum)	147	9.52	Full Metal Jacket Flat Point	200	960	930	910	890	870	295	280	270	260	250	0.3	1.3	2.9	5.3	4
AE38S1	38 Super High Velocity +P	130	8.42	Full Metal Jacket	200	1200	1140	1100	1050	1020	415	380	350	320	300	0.2	0.8	1.9	3.6	5
AE357S2	357 Sig	125	8.10	Full Metal Jacket	200	1350	1270	1190	1130	1080	510	445	395	355	325	0.2	0.7	1.6	3.1	4
AE40R2	40 S&W	155	10.04	Full Metal Jacket	200	1140	1080	1030	990	960	445	400	365	335	315	0.2	0.9	2.2	4.1	4
AE40R3	40 S&W	165	10.66	Full Metal Jacket	200	980	950	920	900	880	350	330	310	295	280	0.3	1.2	2.8	5.1	4
AE40R1	40 S&W	180	11.66	Full Metal Jacket	200	990	960	940	910	890	390	370	350	330	315	0.3	1.2	2.7	5.0	4
AE10A	10mm Auto	180	10.37	Full Metal Jacket	150	1060	1025	990	965	940	400	370	350	330	310	0.2	1.1	2.5	4.3	5
NEW AE45GA	45 G.A.P.	185	11.99	TMJ	150	1090	1020	970	920	890	490	430	385	350	320	0	1	2.5	4.7	5
AE45A	45 Auto	230	14.90	Full Metal Jacket	150	850	830	810	790	770	370	350	335	320	305	0.4	1.6	3.6	6.6	5

+ P ammunition is loaded to a higher pressure. Use only in firearms recommended by the gun manufacturer. "V" indicates vented barrel to simulate service conditions. TMJ = Total Metal jacket

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.

Premium® V•Shok™

Deadly on Varmints

Federal Premium is proud to offer the incredible .17 HMR and the powerful .22 Win. Magnum. If you like to shoot varmints, you'll find Speer TNT Hollow-Points and Hornady V-Max perfect bullet choices for your favorite pastime. You're sure to see some serious results when squeezing the trigger and unleashing the amazing muzzle velocity of these two cartridges. It's almost unfair...



New Look available mid-year 2004.

V • S H O K™ R I M F I R E

TYPE	FEDERAL LOAD NO.	CARTRIDGE PER BOX	CALIBER	BULLET WGT. IN GRAINS	BULLET STYLE	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)				ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)				WIND DRIFT IN INCHES 10 MPH CROSSWIND			HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE.						
						MUZZLE	50 YDS.	100 YDS.	150 YDS.	MUZZLE	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.				
NEW	Magnum	P771	50	17 HMR	17	Hornady V-Max	2550	2380	1900	1620	245	185	135	100	0.8	3.3	8.0	⊕	-1.3	-5.0	+0.1	⊕	-2.6
NEW	Magnum	P770	50	17 HMR	17	Speer TNT JHP	2550	2380	1900	1620	245	185	135	100	0.8	3.3	8.0	⊕	-1.3	-5.0	+0.1	⊕	-2.6
	Magnum	P765	50	22 Win. Magnum	30	Speer TNT HP	2200	1720	1340	1080	325	200	120	80	1.6	7.2	17.5	⊕	-1.5	-8.1	+0.8	⊕	-5.8

JHP = Jacketed Hollow Point HP = Hollow Point

Premium® Gold Medal®

No Substitute

Federal's Gold Medal product line is long known for high-quality performance. Our target .22 Long Rifle round is no exception, with consistent performance and velocities.



New Look available mid-year 2004.

G O L D M E D A L® R I M F I R E

TYPE	FEDERAL LOAD NO.	CARTRIDGE PER BOX	CALIBER	BULLET WGT. IN GRAINS	BULLET STYLE	MUZZLE	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)				ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)				WIND DRIFT IN INCHES 10 MPH CROSSWIND				HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE.					
							25 YDS.	50 YDS.	75 YDS.	100 YDS.	MUZZLE	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	25 YDS.	50 YDS.	75 YDS.	100 YDS.	
Target	711B	50	22 Long Rifle	40	Solid	1080	1030	1000	960	930	105	95	90	80	75	0.3	1.0	2.2	3.9	0.3	⊕	-2.4	-7.2	

These ballistic specifications were derived from test barrels 24 inches in length.

Game•Shok™

Puts Meat in Your Stew

Squirrel hunters everywhere know there's no substitute for the accuracy and consistency of .22 Long Rifle and .22 Win. Magnum cartridges. And with Federal, you have a choice between several tried-and-true bullets—from Copper-Plated Solid to Jacketed Hollow-Point, we've got what you need. Whatever furry-tailed quarry you're after, Game•Shok is your best ally.

New Look available mid-year 2004.



G A M E • S H O K™ R I M F I R E

FEDERAL LOAD NO.	CARTRIDGES PER BOX	CALIBER	BULLET WGT. IN GRAINS	BULLET STYLE	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)				ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)				WIND DRIFT IN INCHES 10 MPH CROSSWIND			HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE.					
					MUZZLE	50 YDS.	100 YDS.	150 YDS.	MUZZLE	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.			
710	50	22 Long Rifle HV	40	Copper Plated Solid	1260	1100	1020	940	140	110	90	80	1.5	5.5	11.4	⊕	-6.5	-21.0	+2.7	⊕	-10.8
712	50	22 Long Rifle HV	38	Copper Plated HP	1280	1120	1020	950	140	105	90	75	1.6	5.8	12.1	⊕	-6.3	-20.6	+2.7	⊕	-10.6
724	50	22 Long Rifle HV†	31	Copper Plated HP	1550	1280	1100	980	165	115	85	65	1.7	7.0	15.5	⊕	-3.8	-14.7	+1.9	⊕	-9.0
810	100	22 Long Rifle HV	40	Copper Plated Solid	1260	1100	1020	940	140	110	90	80	1.5	5.5	11.4	⊕	-6.5	-21.0	+2.7	⊕	-10.8
716	50	22 Long Rifle Bird Shot	25	No. 12 Lead Shot	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
757	50	22 Win. Magnum	50	JHP	1650	1450	1280	1150	300	235	180	145	1.1	4.5	10.3	⊕	-3.6	-12.5	+1.3	⊕	-6.5
767	50	22 Win. Magnum	30	JHP	2200	1760	1400	1130	325	205	130	85	1.4	6.3	15.4	⊕	-1.3	-7.3	+0.7	⊕	-5.2

HV = High Velocity HV† = Hyper-Velocity HP = Hollow Point JHP = Jacketed Hollow Point

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.

Champion® Target For The Plinker in You

Time flies at the plinking range. Our Champion target loads are the answer for the volume shooter like you and are available in Solid and Full Metal Jacket bullet options. With our # 510, formerly known as Federal "Lightning," you'll find the same great performance you've come to truly enjoy.

New Look available mid-year 2004.



C H A M P I O N ® R I M F I R E

FEDERAL LOAD NO.	CARTRIDGES PER BOX	CALIBER	BULLET WGT. IN GRAINS	BULLET STYLE	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)				ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)				WIND DRIFT IN INCHES 10 MPH CROSSWIND			HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE.					
					MUZZLE	50 YDS.	100 YDS.	150 YDS.	MUZZLE	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.
510	50	22 Long Rifle HV	40	Solid	1260	1100	1020	940	140	110	90	80	1.5	5.5	11.4	⊕	-6.5	-21.0	+2.7	⊕	-10.8
NEW 745	525	22 Long Rifle	36	Copper Plated HP	1255	1100	1000	930	125	95	80	70	1.5	5.7	12.1	⊕	-5.6	-19.9	+2.8	⊕	-11.4
737	50	22 Win. Magnum	40	Full Metal Jacket	1910	1600	1330	1140	325	225	155	115	1.3	5.7	13.4	⊕	-2.9	-10.7	+1.0	⊕	-5.8

HP = Hollow Point HV = High Velocity These ballistic specifications were derived from test barrels 24 inches in length.

American Eagle® Scratch That Itch

Another great option for the itchy trigger finger is Federal's affordable American Eagle .22 Long Rifle High Velocity offering. Choose from a .38 or .40-grain bullet and see outstanding performance for whatever your pursuit.



A M E R I C A N E A G L E ® R I M F I R E

FEDERAL LOAD NO.	CARTRIDGES PER BOX	CALIBER	BULLET WGT. IN GRAINS	BULLET STYLE	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)				ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)				WIND DRIFT IN INCHES 10 MPH CROSSWIND			HEIGHT OF BULLET TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 100 YARDS. SIGHTS 1.5 INCHES ABOVE BORE LINE.					
					MUZZLE	50 YDS.	100 YDS.	150 YDS.	MUZZLE	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.	50 YDS.	100 YDS.	150 YDS.
AE22	40	22 Long Rifle High Velocity	38	Copper Plated HP	1280	1120	1020	950	140	105	90	75	1.6	5.8	12.1	⊕	-6.3	-20.6	+2.7	⊕	-10.6
AE5022	50	22 Long Rifle High Velocity	40	Solid	1260	1100	1020	940	140	110	90	80	1.5	5.5	11.4	⊕	-6.5	-21.0	+2.7	⊕	-10.8

HP = Hollow Point

These trajectory tables were calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.



Gold Medal® and Champion® Primers

Premium® Gold Medal® Primers

The same quality primers that make our Gold Medal cartridges the choice of match shooters everywhere are also available to those who load their own. Gold Medal Primers are manufactured to exacting tolerances and use Federal's exclusive basic lead styphnate priming mix for optimum primer ignition.



New Look available mid-year 2004.

Champion® Primers

When you're hot, you're hot. Only Federal makes these basic lead styphnate primers. They're the hottest-burning primers you can put in a handload.



New Look available mid-year 2004.

GOLD MEDAL® PRIMERS			
FEDERAL LOAD NO.	TYPE	USE	NOMINAL DIAMETER
GM100M	Small Pistol Match	Std. velocity pistol and revolver	.175
GM150M	Large Pistol Match	Std. and magnum pistol and revolver	.210
GM155M	Large Magnum Pistol Match	Magnum revolver	.210
GM200M	Small Magnum Pistol Match	High velocity and magnum pistol and revolver	.175
GM205M	Small Rifle Match	Small rifle	.175
GM210M	Large Rifle Match	Large rifle	.210
GM215M	Large Magnum Rifle Match	Magnum rifle	.210

CHAMPION® PRIMERS			
FEDERAL LOAD NO.	TYPE	USE	NOMINAL DIAMETER
209A	Shotshell	10, 12, 16, 20, 28 and 410 gauge	.243
100	Small Pistol	Std. velocity pistol and revolver	.175
150	Large Pistol	Std. and magnum pistol and revolver	.210
155	Large Magnum Pistol	Magnum revolver	.210
200	Small Magnum Pistol	High velocity and magnum pistol and revolver	.175
205	Small Rifle	Small rifle	.175
210	Large Rifle	Large rifle	.210
215	Large Magnum Rifle	Magnum rifle	.210

Champion® Wads

The one-piece plastic wad with great flexibility and spring-action design. Provides no-tilt, controlled compression, and multiple sealing on loading and firing.

CHAMPION® WADS		
GAUGE	FEDERAL NO.	USE
12	12S0	7/8 and 1 oz. loads in Gold Medal target shells
12	12S3	1-1/8 oz. loads in Gold Medal target and hunting shells
12	12S4	1-1/4 oz. loads in Gold Medal target and hunting shells
20	20S1	7/8 and 1 oz. in all shells
28	28S1	3/4 oz. loads
.410	410SC	1/2 oz. loads (shot cup only)



Photo courtesy of Winerhawk Outfitters

Premium® Vital•Shok™ Slugs

Approaching Rifle-Like Performance



Barnes Expander Sabot Slug



Sabot Slug



Rifled Slug

We take slug load development very seriously. Our Barnes® Expander™ Sabot Slugs are capable of 2-inch groups at 100 yards out of a 12-gauge fully rifled barrel. Now that's accurate. And with 150% greater expansion than conventional sabot slugs, Expander is top-tier—by anyone's standards. Premium slugs are also available in a standard sabot slug, and for the smoothbore hunter, Premium Rifled Slug fits the bill.

VITAL • SHOK™ SLUGS										VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)						ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					HEIGHT OF SLUG TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 25 YARDS, SIGHTS 5 INCHES ABOVE BORE LINE.					TEST BARREL LENGTH INCHES	
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	SLUG TYPE	SLUG WEIGHT OUNCES	GRAINS	DRAM EQUIV.	MUZZLE	25YDS.	50YDS.	75YDS.	100YDS.	125YDS.	MUZZLE	25YDS.	50YDS.	75YDS.	100YDS.	125YDS.	25 YDS.	50YDS.	75YDS.	100YDS.	125YDS.	INCHES		
PREMIUM® BARNES EXPANDER SABOT SLUGS (Fully Rifled Slug Barrel)																											
P151 XS	12	3	76	Barnes Sabot	1	438	Mag.	1525	1450	1390	1330	1270	1210	2260	2055	1870	1710	1560	1325	+1.3	+2.0	+1.6	⊕	-3.0	30		
P150 XS	12	2¾	70	Barnes Sabot	1	438	Max.	1450	1380	1320	1260	1210	1160	2045	1860	1695	1545	1420	1310	+1.4	+2.2	+1.8	⊕	-3.3	30		
P152 XS	12	2¾	70	Barnes Sabot	¾	325	Mag.	1900	1810	1720	1640	1560	1480	2605	2370	2140	1940	1755	1585	+0.9	+1.2	+1.0	⊕	-1.9	30		
NEW P209 XS	20	3	70	Barnes Sabot	¾	275	Mag.	1900	1800	1710	1610	1530	1450	2205	1985	1775	1595	1425	1280	+0.7	+1.2	+1.0	⊕	-2.0	30		
P207 XS	20	3	76	Barnes Sabot	¾	325	Mag.	1450	1380	1320	1260	1200	1150	1515	1375	1250	1140	1040	960	+1.5	+2.3	+1.8	⊕	-3.3	30		
PREMIUM® SABOT SLUGS (Fully Rifled Slug Barrel or Rifled Choke Tube)																											
P151 SS	12	3	76	Hydra-Shok Sabot HP	1	438	Mag.	1550	1440	1340	1250	1180	1110	2335	2020	1750	1530	1345	1205	+1.4	+2.2	+1.8	⊕	-3.3	30		
P154 SS	12	2¾	70	Hydra-Shok Sabot HP	1	438	Max.	1450	1350	1260	1180	1120	1070	2045	1775	1545	1360	1215	1100	+1.6	+2.5	+2.0	⊕	-3.8	30		
P207 SS	20	3	76	Hydra-Shok Sabot HP	¾	275	Mag.	1450	1330	1230	1140	1070	1020	1285	1080	920	795	705	630	+1.7	+2.6	+2.2	⊕	-4.0	26		
P203 SS	20	2¾	70	Hydra-Shok Sabot HP	¾	275	Max.	1400	1290	1190	1110	1050	1000	1200	1010	860	750	670	610	+1.8	+2.8	+2.3	⊕	-4.3	26		
PREMIUM® RIFLED SLUGS (Smooth Bore Barrel)																											
LR P127 LRS	12	2¾	70	Hydra-Shok HP	1	438	Max.	1300	1200	1110	1050	1000	—	1645	1390	1205	1070	965	—	+0.5	⊕	-2.3	-6.5	—	30		
P127 RS	12	2¾	70	Hydra-Shok HP	1	438	Max.	1610	1460	1330	1220	1140	—	2520	2075	1725	1455	1255	—	+0.3	⊕	-1.5	-4.3	—	30		

HP = Hollow Point This trajectory table was calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.

LR Look for the Low Recoil logo on select products for a softer shooting load.

VITAL • SHOK™ BUCKSHOT										Premium® Vital•Shok™ Buckshot									
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	DRAM EQUIV.	MUZZLE VELOCITY	SHOT SIZES		For Dense Patterns On Target											
P108	10	3½	89	Magnum	1100	18 Pellets	- 00 Buck												
P108	10	3½	89	Magnum	1100	24 Pellets	- 1 Buck												
P135	12	3½	89	Magnum	1100	18 Pellets	- 00 Buck												
P135	12	3½	89	Magnum	1100	24 Pellets	- 1 Buck												
P158	12	3	76	Magnum	1225	10 Pellets	- 000 Buck												
P158	12	3	76	Magnum	1210	15 Pellets	- 00 Buck												
P158	12	3	76	Magnum	1040	24 Pellets	- 1 Buck												
P158	12	3	76	Magnum	1210	41 Pellets	- 4 Buck												
P156	12	2¾	70	Magnum	1290	12 Pellets	- 00 Buck												
P156	12	2¾	70	Magnum	1250	34 Pellets	- 4 Buck												
P154	12	2¾	70	Max.	1325	9 Pellets	- 00 Buck												
P258	20	3	76	Max.	1175	18 Pellets	- 2 Buck												
P256	20	2¾	70	Max.	1100	20 Pellets	- 3 Buck												

Buckshot Sizes

	No. 000	No. 00	No. 0	No. 1	No. 2	No. 3	No. 4
Pellet Diameter							
Inches	.36	.33	.32	.30	.27	.25	.24
mm	9.14	8.38	8.13	7.62	6.86	6.35	6.10



Premium shot is copper-plated for uniform pellets and deep penetration.

Power•Shok™ Slugs

For Hard-Hitting Performance



Sabot Slug



Rifled Slug

Power•Shok is an outstanding slug choice. Available in a standard 1-ounce sabot slug and a variety of rifled slug weights, you'll be thrilled with the power these slugs bring to the target. The Power•Shok slug line provides you with the widest variety of gauges and a very palatable price.



POWER • SHOK™ SLUGS																									
FEDERAL LOAD NO.	SHELL LENGTH		SLUG TYPE	SLUG WEIGHT	DRAM EQUIV.	VELOCITY IN FEET PER SECOND (TO NEAREST 10 FPS)					ENERGY IN FOOT-POUNDS (TO NEAREST 5 FOOT-POUNDS)					HEIGHT OF SLUG TRAJECTORY IN INCHES ABOVE OR BELOW LINE OF SIGHT IF ZEROED AT 25 YARDS. SIGHTS .5 INCHES ABOVE BORE LINE.					TEST BARREL LENGTH INCHES				
	GAUGE	INCHES				MM	OUNCES	GRAINS	MUZZLE	25YDS.	50YDS.	75YDS.	100YDS.	125YDS.	MUZZLE	25YDS.	50YDS.	75YDS.	100YDS.	125YDS.		25 YDS.	50YDS.	75YDS.	100YDS.
SABOT SLUGS (Fully Rifled Slug Barrel or Rifled Choke Tube)																									
F127 SS	12	2 3/4	70	Sabot Hollow Point	1	438	Max.	1450	1350	1260	1180	1120	1070	2045	1775	1545	1360	1215	1100	+1.6	+2.5	+2.0	⊕	-3.8	30
RIFLED SLUGS (Smooth Bore Barrel)																									
F103 RS	10	3 1/2	89	Hollow Point	1 3/4	766	Mag.	1280	1160	1080	1020	970	-	2785	2295	1980	1775	1605	-	+0.5	⊕	-2.3	-6.7	-	32
F131 RS	12	3	76	Hollow Point	1 1/4	547	Mag.	1600	1450	1320	1210	1130	-	3110	2555	2120	1785	1540	-	+0.3	⊕	-1.5	-4.4	-	30
F130 RS	12	2 3/4	70	Hollow Point	1 1/4	547	Mag.	1520	1380	1260	1160	1090	-	2805	2310	1930	1645	1450	-	+0.3	⊕	-1.7	-4.9	-	30
F127 RS	12	2 3/4	70	Hollow Point	1	438	Max.	1610	1460	1330	1220	1140	-	2520	2075	1725	1455	1255	-	+0.3	⊕	-1.5	-4.3	-	30
* F127 RSX	12	2 3/4	70	Hollow Point	1	438	Max.	1610	1460	1330	1220	1140	-	2520	2075	1725	1455	1255	-	+0.3	⊕	-1.5	-4.3	-	30
F164 RS	16	2 3/4	70	Hollow Point	3/4	350	Max.	1600	1360	1180	1060	990	-	1990	1435	1075	875	755	-	+0.3	⊕	-1.8	-5.4	-	28
F207 RS	20	3	76	Hollow Point	3/4	325	Mag.	1680	1500	1340	1210	1110	-	2055	1640	1310	1065	890	-	+0.2	⊕	-1.4	-4.4	-	30
F203 RS	20	2 3/4	70	Hollow Point	3/4	328	Max.	1600	1420	1270	1150	1070	-	1865	1465	1175	965	835	-	+0.3	⊕	-1.6	-4.8	-	26
F412 RS	410	2 1/2	63.5	Hollow Point	1/4	109	Max.	1780	1540	1340	1180	1060	-	770	580	435	335	275	-	+0.2	⊕	-1.4	-4.4	-	26

This trajectory table was calculated by computer using the best available data for each load. Trajectories are representative of the nominal behavior of each load at standard conditions (59°F temperature; barometric pressure of 29.53 inches; altitude at sea level). Shooters are cautioned that actual trajectories may differ due to variations in altitude, atmospheric conditions, guns, sights and ammunition.

* 10 Rounds/Box



POWER • SHOK™ BUCKSHOT

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH		DRAM EQUIV.	MUZZLE VELOCITY	SHOT SIZES	
		INCHES	MM				
BUCKSHOT							
F131	12	3	76	Magnum	1225	10 Pellets	- 000 Buck
F131	12	3	76	Magnum	1210	15 Pellets	- 00 Buck
F131	12	3	76	Magnum	1210	41 Pellets	- 4 Buck
F130	12	2 3/4	70	Magnum	1290	12 Pellets	- 00 Buck
F130	12	2 3/4	70	Magnum	1250	34 Pellets	- 4 Buck
F127	12	2 3/4	70	Max.	1325	8 Pellets	- 000 Buck
F127	12	2 3/4	70	Max.	1325	9 Pellets	- 00 Buck
F127	12	2 3/4	70	Max.	1250	16 Pellets	- 1 Buck
F127	12	2 3/4	70	Max.	1325	27 Pellets	- 4 Buck
F164	16	2 3/4	70	Max.	1225	12 Pellets	- 1 Buck
F207	20	3	76	Magnum	1200	18 Pellets	- 2 Buck
F203	20	2 3/4	70	Max.	1200	20 Pellets	- 3 Buck
LOW RECOIL BUCKSHOT							
H132	12	2 3/4	70	3	1140	9 Pellets	- 00 Buck
H132	12	2 3/4	70	3	1140	27 Pellets	- 4 Buck

Look for the Low Recoil logo on select products for a softer shooting load.

Power•Shok™ Buckshot Tighter Downrange Patterns

Many hunters use buckshot to bring home the venison—and with the dramatic power of our available loads, it's no wonder. Each load features a Triple Plus® wad system that gives you better shot alignment and a granulated plastic buffer to keep shot pellets uniform in shape. You get tight downrange patterns and better stopping power with Power•Shok Buckshot.

Premium® Ultra•Shok™ Steel

Raising the Bar

ULTRA • SHOK™								
HEAVY HIGH VELOCITY STEEL								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY		SHOT CHARGE WGT. OUNCES	GRAMS	SHOT SIZES
PW107	10	3½	89	1450	Magnum	1½	42.52	T, BBB, BB, 1, 2, 3
PW134	12	3½	89	1500	Magnum	1½	38.98	T, BBB, BB, 1, 2, 3, 4
PW142	12	3	76	1450	Magnum	1¼	35.44	T, BBB, BB, 1, 2, 3, 4, 6
PW145	12	2¾	70	1375	Magnum	1¼	35.44	T, BBB, BB, 1, 2, 3, 4, 6
HIGH VELOCITY STEEL								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY		SHOT CHARGE WGT. OUNCES	GRAMS	SHOT SIZES
PW102	10	3½	89	1500	Magnum	1¾	38.98	T, BBB, BB, 1, 2, 3
PW133	12	3½	89	1550	Magnum	1¾	38.98	T, BBB, BB, 1, 2, 3, 4
PW143	12	3	76	1550		1½	31.89	T, BBB, BB, 1, 2, 3, 4, 6
PW168	16	2¾	70	1350	Magnum	1½/16	26.58	2, 4
PW209	20	3	76	1350	Magnum	1	28.35	1, 2, 3, 4
PW208	20	2¾	70	1450		¾	21.25	4, 6



Speed and power is what it's all about. Heavy High Velocity Steel is packed with larger shot payloads for more downrange pellet energy and more pellets on target. And with High Velocity Steel you've got the fastest steel load on the market that's quicker to the target for shorter leads at longer ranges and harder hitting on impact.

Premium® Tungsten-Iron

Increase Your Reach

TUNGSTEN - IRON								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY		SHOT CHARGE WGT. OUNCES	GRAMS	SHOT SIZES
PWT105	10	3½	89	1450		1½	38.98	BBB, BB, 2
PWT136	12	3½	89	1400		1½	38.98	BBB, BB, 2, 4
PWT185	12	3	76	1300		1½	38.98	BB, 2, 4, 5
PWT181	12	3	76	1400		1½	31.89	BBB, BB, 2, 4, 5
PWT220	20	3	76	1375		¾	24.80	2, 4
METRO SUB-SONIC (Low Recoil)								
<small>LR</small> MWT181	12	3	76	850 (Sub-Sonic)		1½	31.89	BB

LR Look for the Low Recoil logo on select products for a softer shooting load.

Is your quarry setting up in the middle of the slough leaving you with nothing but marginal pass-shooting? For longer-range waterfowl shots, the choice is clear—Premium Tungsten-Iron will allow you to reach out and crumple birds flying fast and far. With pellets 94% as dense as lead, there's no getting past this hard-hitting pattern.

Speed•Shok™ Steel

High Performance Steel At a Popular Price

SPEED • SHOK™								
STEEL								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY		SHOT CHARGE WGT. OUNCES	GRAMS	SHOT SIZES
WF133	12	3½	89	1550	Magnum	1¾	38.98	BB, 2, 3
WF140	12	3	76	1400	Magnum	1¼	35.44	BB, 2, 3, 4
WF143	12	3	76	1550		1½	31.89	BB, 2, 3, 4
WF147	12	2¾	70	1375		1½	31.89	BB, 2, 3, 4, 6
WF146	12	2¾	70	1375		1	28.35	6, 7
WF207	20	3	76	1300	Magnum	¾	24.80	2, 4
WF208	20	2¾	70	1425		¾	21.25	7



Speed•Shok gives hunters a selection of shells for both waterfowl and upland game hunting where non-toxic shot is required. These loads are built for performance with uniformly round pellets for tighter shot patterns, and specially formulated powder for excellent Knockdown Power®. Speed•Shok loads also feature high-density plastic wads with a gas-sealing flange for maximum efficiency. Plus, their high output primers ensure consistent ballistics and solid dependability even in cold and wet conditions.

GAME GUIDE

	GAUGE	DISTANCE (YDS)	CHOKE	STEEL SHOT SIZES	TUNGSTEN-IRON SHOT SIZES	
	Large Ducks	10, 12, 16, 20	20-30	IC/M	1, 2, 3, 4	2, 4, 5
	(Mallard, Pintail)	10, 12, 16, 20	30 +	IC/M/F	BB, 1, 2, 3	2, 4
	Medium Ducks	12, 16, 20	20-30	IC/M	2, 3, 4, 6	4, 5
	(Wood Duck, Widgeon)	12, 16, 20	30+	IC/M/F	1, 2, 3, 4	4, 5
	Small Ducks	12, 16, 20	20-30	IC/M	3, 4, 6	4, 5
	(Teal, Bufflehead)	12, 16, 20	30+	IC/M/F	3, 4	4, 5
	Large Geese	10, 12	20-30	IC/M	T, BBB, BB	BBB, BB
	(Giant, Western Canada)	10, 12	30+	IC/M	T, BBB, BB	BBB, BB
	Medium Geese	10, 12	20-30	IC/M	BBB, BB, 1	BB, 2
	(Snow, Lesser Canada)	10, 12	30+	IC/M	BBB, BB, 1	BB, 2

Federal recommends patterning your gun to determine the optimum choke. F = Full M = Modified IC = Improved Cylinder

Shot Sizes Lead and Steel

	T	BBB	BB	1	2	3	4	5	6	7	7½	8	8½	9
Pellet Diameter														
Inches	.20	.19	.18	.16	.15	.14	.13	.12	.11	.10	.095	.09	.085	.08
mm	5.08	4.83	4.57	4.06	3.81	3.56	3.30	3.05	2.79	2.54	2.41	2.29	2.16	2.03

AVERAGE PELLET COUNT-LEAD SHOT														
Weight of Shot in Ounces (Grams) (3% ANTIMONY)														
SHOT SIZE	1/2	11/16	3/4	7/8	1	1-1/8	1-1/4	1-5/16	1-3/8	1-1/2	1-5/8	1-7/8	2	2-1/4
	(14.17)	(19.49)	(21.25)	(24.80)	(28.35)	(31.89)	(35.44)	(37.21)	(38.98)	(42.52)	(46.06)	(53.15)	(56.70)	(63.78)
9	292	402	439	512	585	658	731	767	804	877	951	1097	1170	1316
8½	249	342	373	435	497	559	621	652	683	745	808	932	994	1118
8	205	282	307	359	410	461	512	538	564	615	666	769	820	922
7½	175	241	262	306	350	394	437	459	481	525	569	656	700	787
6	112	155	169	197	225	253	281	295	309	337	366	422	450	506
5	85	117	127	149	170	191	212	223	234	255	276	319	340	382
4	67	93	101	118	135	152	169	177	186	202	219	253	270	304
2	43	60	65	76	87	98	109	114	120	130	141	163	174	196
BB	25	34	37	44	50	56	62	65	69	75	81	94	100	112

AVERAGE PELLET COUNT-STEEL SHOT									
Weight of Shot in Ounces (Grams)									
SHOT SIZE	3/4	15/16	1	1-1/8	1-1/4	1-3/8	1-1/2	1-9/16	1-5/8
	(21.25)	(26.58)	(28.35)	(31.89)	(35.44)	(38.98)	(42.52)	(44.30)	(46.06)
7	316	395	422	475	527	580	633	659	685
6	236	295	315	354	394	433	472	492	512
5	182	228	243	273	304	334	364	380	395
4	144	180	192	216	240	264	288	300	312
3	118	143	158	178	197	217	237	247	257
2	94	117	125	141	156	172	187	195	203
1	77	97	103	116	129	142	154	161	167
BB	54	67	72	81	90	99	108	112	117
BBB	46	58	62	70	77	85	93	97	101
T	39	49	52	58	65	71	78	81	84

Density & Pellet Count, Demystified

PELLET DENSITY	
Lead	11.1 gm/cc
Tungsten-Iron	10.4 gm/cc
Steel	7.9 gm/cc

PELLETS PER OUNCE			
Pellet Size	Lead	Tungsten-Iron	Steel
T			52
BBB		46	62
BB	50	54	72
1			103
2	87	94	125
3			158
4	135	140	192
5	170	177	
6	225		315
7			422

High density pellets provide better down range energy and penetration. Federal's tungsten-iron pellets are 94% as dense as lead and 10% denser than bismuth. Federal steel is about 75% the density of tungsten.

A given shot size is always a specific diameter, regardless of material; a #2 pellet is .15"/3.81mm, as is a #2 lead or a #2 tungsten. But, because of differences in density, there are 125 steel #2 pellets in an ounce, compared to 94 tungsten #2 pellets or 87 lead #2 pellets.

Keep in mind that both steel and tungsten pellets retain their shape better than lead pellets when fired ensuring tighter patterns.

Premium® Mag•Shok™ Turkey Loads

Chamber The Best



M A G • S H O K™								
M A G N U M								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
PT135	12	3½	89	1150	Max.	2¼	63.78	4, 5, 6
PT159	12	3	76	1175	4	2	56.70	4, 5, 6
H I G H V E L O C I T Y								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
GST101	10	3½	89	1300	Magnum	2	56.70	4, 5, 6
GST139	12	3½	89	1300	Magnum	2	56.70	4, 5, 6
GST157	12	3	76	1300	Max.	1½	53.15	4, 5, 6
GST156	12	2¾	70	1315	4	1½	42.52	4, 5, 6
GST258	20	3	76	1185	3	1½	37.20	4, 5, 6



Premium® Wing•Shok™

The True Upland Hunter's Choice

W I N G • S H O K™								
M A G N U M								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
P109	10	3½	89	1210	4½	2¼	63.78	BB
P158	12	3	76	1210	4	1½	53.15	BB, 2, 4, 6
P156	12	2¾	70	1315	4	1½	42.52	BB, 4, 6
P165	16	2¾	70	1260	3¼	1¼	35.44	4, 6
P258	20	3	76	1185	3	1¼	35.44	4, 6
P256	20	2¾	70	1175	2¾	1½	31.89	4, 6
H I G H V E L O C I T Y — P H E A S A N T S F O R E V E R L O A D								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
PF154	12	2¾	70	1400	Max.	1¼	35.44	4, 5, 6, 7.5
PF204	20	2¾	70	1240	Max.	1	28.35	4, 5, 6, 7.5
H I G H V E L O C I T Y								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
P128	12	2¾	70	1400	Max.	1½	31.89	4, 6, 7.5
P138	12	2¾	70	1400	Max.	1½	38.98	4, 5, 6
H I - B R A S S®								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
P283	28	2¾	70	1295	2¼	¾	21.25	6, 7.5, 8
F L Y E R L O A D S								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
P153	12	2¾	70	1220	3¼	1¼	35.44	6, 7.5, 8



Our Mag•Shok™ turkey loads offer you the best option for big, wily gobblers. Next time they hang up on you at the edge of your range, feel confident knowing that you have the reach and power to take home the prize. Copper-plated pellets provide uniform patterns and deep penetration on target. Formerly known as Grand Slam turkey, high velocity loads feature the National Wild Turkey Federation logo, signaling Federal's deep-rooted commitment to the organizations that keep game in the wild.



If you're serious about upland bird hunting, there's no better ammunition than our copper-plated, Premium Wing•Shok. For roosters, grouse, chukars, quail and more, you've got confidence when you shoot the best. When you purchase special edition Pheasant's Forever loads, you can take pride in knowing that a percentage of the price you pay goes directly to the organization that supports your bird hunting heritage. And with 1400 feet per second of muzzle velocity in our 12-gauge load, you increase your range on those fast-flying birds.



GAME GUIDE

		GAUGE	DISTANCE (YDS)	CHOKE	LEAD SHOT SIZES
	Turkey	10, 12, 20 10, 12	20-30 30+	F F/EF	4, 5, 6 4, 5, 6
	Pheasant & Prairie Grouse	12, 16, 20, 28 12, 16, 20	20-30 30+	IC/M M/F	4, 5, 6, 7½ 4, 5, 6
	Ruffed Grouse & Partridge	12, 16, 20, 28 12, 16, 20	20-30 30+	SK/IC/M IC/M	6, 7½, 8, 9 5, 6, 7½
	Quail & Dove	12, 16, 20, 28 12, 16, 20	20-30 30+	SK/IC/M IC/M	7½, 8, 9 7½, 8
	Woodcock & Rail Snipe	12, 16, 20, 28 12, 16, 20	20-30 30+	SK/IC/M IC/M	7½, 8, 9 7½, 8
	Rabbit & Squirrel	12, 16, 20, 28, 410 12, 16, 20	20-30 30+	IC/M IC/M/F	4, 5, 6, 7½ 4, 5, 6

Federal recommends patterning your gun to determine the optimum choke.

EF = Extra Full
 F = Full
 M = Modified
 IC = Improved Cylinder
 SK = Skeet

GAME • SHOK™								
MAGNUM								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
F129	12	3	76	1280	4	1½	46.06	2, 4, 6
F130	12	2¾	70	1260	3¾	1½	42.52	4, 5, 6
F207	20	3	76	1185	3	1¼	35.44	4, 6, 7.5
F205	20	2¾	70	1175	2¾	1½	31.89	4, 6
HI - BRASS®								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
H126	12	2¾	70	1330	3¾	1¼	35.44	4, 5, 6, 7.5
H163	16	2¾	70	1295	3¼	1½	31.89	4, 6, 7.5
H204	20	2¾	70	1220	2¾	1	28.35	4, 5, 6, 7.5
H413	410	3	76	1135	Max.	1⅞	19.49	4, 5, 6, 7.5, 8
H412	410	2½	63.5	1200	Max.	½	14.17	6, 7.5
HEAVY FIELD								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
H125	12	2¾	70	1220	3¼	1¼	35.44	4, 5, 6, 7.5, 8
H123	12	2¾	70	1255	3¼	1½	31.89	4, 6, 7.5, 8
H202	20	2¾	70	1165	2½	1	28.35	6, 7.5, 8
GAME LOAD								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
H121	12	2¾	70	1290	3¼	1	28.35	6, 7.5, 8
H160	16	2¾	70	1165	2½	1	28.35	6, 7.5, 8
H200	20	2¾	70	1210	2½	¾	24.80	6, 7.5, 8
METRO SUB-SONIC LOW RECOIL LOAD								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
M123	12	2¾	70	900	Sub-Sonic	1½	31.89	7.5
FIELD TRIAL TRAINING LOAD								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE OUNCES	WGT. GRAMS	SHOT SIZES
FP12	12	2¾	70	—	—	—	—	Blank

Game•Shok™

Effective and Affordable

Are you an avid rabbit or squirrel hunter? Love to hunt upland birds, but need to save some money to buy dog food for your best friend? Choose Game•Shok to keep you effective in the field and heavy in the pocket book. Magnum and Hi-Brass loads provide superior performance on your favorite small game. Also available from Federal are low-recoil, sub-sonic lead loads and field trial loads.



Look for the Low Recoil logo on select products for a softer shooting load.

G O L D M E D A L ® T A R G E T

PLASTIC

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
T113	12	2 3/4	70	1180	2 3/4	1	28.35	7.5, 8, 8.5, 9
T115	12	2 3/4	70	1145	2 3/4	1 1/8	31.89	7.5, 8, 9
T116	12	2 3/4	70	1200	3	1 1/8	31.89	7.5, 8, 9
T206	20	2 3/4	70	1200	2 1/2	7/8	24.80	8, 9
T280	28	2 3/4	70	1230	2	3/4	21.25	8.5, 9
T412	410	2 1/2	63.5	1230	Max.	1/2	14.17	8.5, 9

H A N D I C A P P L A S T I C H I G H V E L O C I T Y

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
T178	12	2 3/4	70	1235	HDCP	1 1/8	31.89	7.5, 8

I N T E R N A T I O N A L P L A S T I C

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
N110*	12	2 3/4	70	1325	3 3/4	—	24.00	7.5, 8.5

E X T R A - L I T E ® P L A S T I C (L O W R E C O I L)

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
<small>LR</small> T114	12	2 3/4	70	1100	Extra-Lite	1 1/8	31.89	7.5, 8

P A P E R

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
T175	12	2 3/4	70	1180	2 3/4	1	28.35	8, 8.5
T117	12	2 3/4	70	1145	2 3/4	1 1/8	31.89	7.5, 8, 9
T118	12	2 3/4	70	1200	3	1 1/8	31.89	7.5, 8, 9

H A N D I C A P P A P E R H I G H V E L O C I T Y

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
T171	12	2 3/4	70	1235	HDCP	1 1/8	31.89	7.5, 8

I N T E R N A T I O N A L P A P E R

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
N119*	12	2 3/4	70	1325	3 3/4	—	24.00	7.5

E X T R A - L I T E ® P A P E R (L O W R E C O I L)

FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
<small>LR</small> T172	12	2 3/4	70	1100	Extra-Lite	1 1/8	31.89	7.5, 8

LR Look for the Low Recoil logo on select products for a softer shooting load.

Top Gun® Target Loads
Reliable and Consistent

For the volume shooter like you who needs consistent performance at a reasonable price, there's our Top Gun target load. Long a staple of the target shooting community, you're sure to break clay after clay with its superior performance and reliability.

T O P G U N ® T A R G E T								
FEDERAL LOAD NO.	GAUGE	SHELL LENGTH INCHES	MM	MUZZLE VELOCITY	DRAM EQUIV.	SHOT CHARGE WT. OUNCES	GRAMS	SHOT SIZES
TG112	12	2 3/4	70	1145	2 3/4	1 1/8	31.89	7.5, 8, 9
TG12	12	2 3/4	70	1200	3	1 1/8	31.89	7.5, 8
NEW TG20	20	2 3/4	70	1210	2 1/2	7/8	24.80	8, 9
S T E E L								
TG147	12	2 3/4	70	1145	2 3/4	1 1/8	31.89	7



Premium®
Gold Medal®
Go For The Gold



New Look available mid-year 2004.

There's a reason your shooting buddies keep asking for your once-fired Gold Medal hulls. Serious target shooters everywhere know how important it is to shoot the best available ammunition. That's why shooters choose Federal Gold Medal when the top prize is on the line. Consistent and uniform patterns, along with extra-hard shot and the hot 209A primer, have made this product a must-have on the target shooting circuit. Available in high velocity handicap, extra-lite, low recoil and our famous paper hull cartridge, you're sure to find your winning combination.

*N110 (7.5) and N119 (7.5) are copper-plated.



New Look available mid-year 2004.

ATK - Ammunition & Related Products



Full Service... a unique concept which means you get all you need in one place.

ATK Ammunition & Related Products... a unique collection of brands which gives you everything you need in one place.

All ATK Ammunition & Related Products brands are proud supporters of the NSSF's Heritage Fund.



FEDERAL

Federal, the only major manufacturer specializing in ammunition, produces Premium ammunition for a variety of uses: hunting, shooting sports, law enforcement and military. Federal also strongly supports conservation and national shooting organizations.



CCI

The leader in rimfire ammunition, CCI is the choice of hunters and plinkers across the globe. It provides shooters with a wide variety of top performing rimfire products that include some of the fastest cartridges on the market. CCI also manufactures world famous primers for reloaders.

CCI

SPEER

The leader in innovative bullet technology, Speer concentrates its development efforts on providing the most advanced bullets for handloaders and factory ammunition. The company also loads outstanding handgun hunting and pistol cartridges that serve sportsmen and law enforcement agencies worldwide.

SPEER

RCBS

RCBS produces high-quality reloading equipment and has for nearly 60 years. The company manufactures presses, dies, scales, bullet moulds and other reloading accessories to meet the most avid reloader's needs. It prides itself on outstanding customer service features the award winning Grand shotshell press—2002 NRA Shooting Illustrated Accessory of the Year.



OUTERS

Outers is a leading manufacturer of gun-care chemicals, solvents, and cleaning kits. Long a mainstay of gun cleaning tables everywhere, Outers is bringing innovative new products to gun cleaning and expanding its product line to include a variety of must-have cleaning products. It's how good, clean shots are made.

Outers

ESTATE

Estate Cartridge manufactures high-quality shotgun ammunition at an affordable price. From target loads to buckshot and high velocity steel, Estate carries it all.



ALLIANT

Technically superior by design, every can of Alliant powder is backed by a century of manufacturing experience and the most exacting quality control procedures in the industry. Alliant produces top quality rifle, pistol and shotshell smokeless powders for the handloading enthusiast and competition shooter.



CHAMPION

Champion target company provides the avid trap, skeet or sporting clays shooter with a wide variety of clay targets, target throwers, and paper and mechanical targets. For the shooter looking to hone their skills, Champion target is a one-stop destination.



INVISIBLE GUN

The first of its kind, the Invisible Gun scent-removing cleaning kit is providing big game hunters with a final line of defense. It's the last step in camouflage for the trophy hunter who knows the importance of masking human scent.



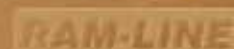
SHOOTERS RIDGE

Rock steady bi-pods, gun vices, rifle and pistol rests comprise a family of rugged, hard working and affordable shot-steadying products for the hunter on the move.



RAM-LINE

Ram-Line® stocks withstand the test of time, adding strength, accuracy and dependability to rifles and shotguns. For the seasoned hunter, beginning shooter or trained professional needing a highly visible law enforcement stock, Ram-Line® has the answer.



GUNSLICK

Innovative gun cleaning solutions are the specialty of Gunslick brand cleaning products. A name shooters and hunters have come to trust over the years.



WEAVER

Weaver provides rifle, pistol and shotgun scope users with a steady and strong way to securely fasten optics to a favorite firearm. Weaver rings set a standard by which mounting systems are still measured.





At Federal, we're committed to providing you with innovative, quality products that ensure all of your adventures in the great outdoors will be both enjoyable and successful. Our customer service personnel have practical knowledge about our product, as well as technical knowledge, because they're outdoor enthusiasts just like you.

If you would like more information regarding FEDERAL, look us up at
www.federalpremium.com

Federal supports the following organizations. Join us and help preserve the rich traditions of hunting and shooting.

4-H Shooting Sports

Amateur Trap Shooting Association

Becoming an Outdoors-Woman

Boy Scouts of America

Buckmasters

Delta Waterfowl

Ducks Unlimited

Foundation for North American Wild Sheep

Future Farmers of America

Hunting & Shooting Sports Heritage Foundation

International Handgun Metallic Silhouette Association

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The Izaak Walton League of America

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National Rifle Association

National Shooting Sports Foundation

National Skeet Shooting Association

National Sporting Clays Association

National Wild Turkey Federation

Pheasants Forever

Rocky Mountain Elk Foundation

Ruffed Grouse Society

Safari Club International

Sporting Arms and Ammunition Manufacturers Institute

U.S. Biathlon Association

U.S. Sportsmen's Alliance

Whitetails Unlimited

Wildlife Management Institute

*Federal donates a portion of its proceeds of ammunition sales to the following organizations:
Rocky Mountain Elk Foundation, National Wild Turkey Federation and Pheasants Forever.*

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