

A GLOSSARY FOR 4-H SHOOTING SPORTS INSTRUCTORS

ACP – abbreviation for Automatic Colt Pistol, for example .45 ACP

action – the parts of the firearm that load, fire and eject the cartridge

action release – a device that unlocks the action; normally found on semi-automatic or slide-action firearms; also called a bolt release in some cases.

adapter – 1) a fixture on the bow for attaching an accessory, like a bow quiver, stabilizer, cable guard, bow-fishing reel or sight; 2) part of the arrow that permits attachment of a nock or point (see screw-in adapter)

adjustable arrow plate – arrow plate that can be adjusted to achieve better arrow flight, usually using set screws or micrometer adjustments

aim-point – an optical sight that superimposes a spot of light on the image of the target

air charge – the compressed air used to propel the pellet in a pneumatic pellet gun

alignment – 1) relationship among two or more items; 2) having all elements true, square and in line with each other

ambidextrous – able to use both hands with equal dexterity

ammo – shooter jargon for ammunition

AMO – Archery Manufacturer's Organization, a trade association of all archery equipment manufacturers

anchor – 1) holding the string at full draw; 2) position of the string, fingers, hand or mechanical release at full draw (see also high anchor and low anchor)

anchor point – a stable reference point for anchoring the sting at full draw

antimony – metal often alloyed with lead to produce a harder shot or bullet material

apache draw – extremely high anchor point, anchoring the nocking point on the cheekbone directly under the dominant eye, preferred for short-range shooting by some archers

aperture – a hold or opening in a sighting device, like the hole in the center of a receiver or peep sight disk

aperture rear sight – 1) device anchored in the string at eye height that the archer looks through at the sight pin; aids in precise sight alignment; commonly used in some archery shooting games, illegal in others; also called a string peep or peep sight; 2) metallic rear sight for a rifle, pistol or shotgun in which the shooter looks through an aperture centering the front sight or front aperture in the opening and aligning the sights with the target; also called a receiver sight or peep sight

apothecary measure – measurement standards used in pharmaceutical and pharmacy measurement

archer's paradox – observation that an arrow must flex to fly true to a mark

arm guard – protective device worn on the inside of the bow arm to keep the clothing out of the string's path and to protect the arm from abrasion by the string.

arm-rest standing position – the standing rifle shooting position where the upper arm is rested against the side of the body for support and stability

arrow plate – lateral rest for the arrow; pad or part of the arrow rest holding the arrow away from the side of the riser

ATA – Amateur Trap shooters Association, the governing body for American trap shooting in the United States

arrow rest – a device for supporting an arrow while it is at rest or being drawn

arrow shelf – the flattened area at the bottom of the sight window on bows with a center shot cutout

attitude – the orientation of the body relative to the target

back – those parts of the bow pointing down range when the bow is properly held in shooting position

back quiver – an arrow-holding device designed to be worn on the archer's back, either centered (center-back quiver) or over the shoulder

backer (backing target) – a second target used to verify shots fired into the record target from other firing points

backstop – the ultimate stopping point for a projectile, often an earthen barrier, berm or slope

ball puller – a screw device used to retrieve a ball from a muzzleloader

ball starter – a device used to insert the ball into the muzzle (short starter) or push it a short distance down the bore (long starter)

bare bow – shooting without the aid of sights or other accessories to aid in sighting, purely "instinctive" shooting

barrel – the tube that contains and directs the projectile [see also bore, chamber, rifling, muzzle]

barrel lug – an extension of the barrel or attachment to the barrel used to attach it to the stock

barrel wedge – tapered pin used to anchor the barrel to the stock on muzzleloading firearms

base wad – the wad surrounding the battery cup in a shot shell; may be composed of fiber, rolled paper, plastic or formed from the hull material

BBs – 1) steel projectiles for air guns, approximately .177 caliber; 2) standard shotgun shot size, approximately .18 inch in diameter

bead – 1) the pointing or sighting aid(s) on a shotgun barrel; may be a small metal bead on a threaded post, a plastic or glass cylinder or a similar object; mid-rib beads are smaller; 2) the primary sighting area of a bead-and-post rifle sight

beavers tail forend – broad shotgun forend commonly seen on doubles, with a shape similar to a beaver’s tail.

bedded barrel– a rifle barrel completely and consistently in contact with the stock material for the entire length of the fore stock

bench-rest position – a rifle shooting position where the shooter is seated at a bench and the rifle is supported on a rest, cradle or sandbags; often used for sighting-in purposes

blooper – an underpowered shot shell that fires with an unusually loud, flat-sounding report; shot and wad may or may not exit the barrel; complete safety check should be made before another shot is fired

blunderbuss – matchlock firearm featuring a bell—shaped muzzle and commonly associated with the Pilgrims

blunt – a flat or broadened arrow point designed for hunting small game and killing the quarry by its impact

bolt – 1) moveable locking device that seals a cartridge in the chamber of a firearm, usually contains the firing pin and a means of extracting cartridges from the chamber; 2) a quarrel or arrow for a crossbow; 3) a threaded rod used as a connector

bolt action – firearm action designed around a manually operated bolt; both turn-bolt and straight-pull designs in use

Boone and Crockett club – one of the major organizations maintaining records of North American gig game animal trophies

bore - channel through which the projectile(s) travel while in the barrel

bore size – 1) the diameter of the bore in a rifle, measured in caliber (hundredths or thousandths of an inch) or millimeters (mm); 2) the gauge or caliber of a shotgun

bore swab – cleaning fixture made of fiber or fabric used to apply solvent, remove fouling, dry the bore or apply oil to the bore

bore case – a protective device for the bow; may be either hard (with high impact resistance) or soft (designed to prevent damage by scraping or minor bumps)

bow hand – hand holding the bow when in proper shooting position; the hand associated with the non-dominant, non-shooting or “off” eye

bow-hand side – the side of the body or target associated with the bow hand

bow press – a device to compress the limbs of a bow, usually used in servicing compound bows or checking adjustments in draw weight

bow quiver – an arrow-holding device designed to be attached to the bow; safety demands that the arrowheads be covered by a cowl or shield on all bow quivers

bow scale – a scale used to find the draw weight, peak weight or holding weight of a bow

bow stringer – a device used to string or unstring a conventional bow (recurve or longbow)

bowyer – a designer and builder of bows

breech block – solid block of metal, either moveable or fixed in position that seals or locks a cartridge in the chamber of a rifle or shotgun

breech plug – threaded plug that seals the breech end of a muzzleloader barrel

bridle – plate that holds internal working parts of the lock in place

broadhead – an arrowhead designed for hunting large game animals and to kill by hemorrhage

buck shot – cold-swaged or cast lead pellets designed to be fired in a shotgun, range in size from No. 4 (approximately .24 caliber) to 000 (approximately .375 to .380 caliber)

buckhorn sight – open rear sight with high, curved sided

bull – 1) abbreviated term for bullseye or center portion of a target; 2) term applied to adult male elk, moose or domestic bovines; 3) content of discussions when shooters or hunters gather to talk

bullet board – loading block holding pre-lubed or patched and lubed bullets or balls, used as a means of speeding loading in a muzzleloading rifle or pistol

bullet mass – weight of a bullet divided by the acceleration of gravity, generally measured in slugs (points/32 feet per second squared) although bullet weight is measured in ounces (shotgun slugs) or grains (rifle bullets or balls); must be calculated to determine bullet energy

bullseye – center portion of a circular target: aiming dot on a target

butt – 1) target backing device designed to stop and hold arrows without damage, may be made of foam blocks or baled materials like paper, straw, excelsior, sugar cane fiber, mash grass or plastic foam; 2) shoulder end of a rifle or shotgun stock; 3) a shooting stand or blind

butt plate _ protective device attached to the shoulder end of the butt stock, usually of metal, horn, plastic or rubber

cable – wire ropes used to provide mechanical advantage on compound bows and cammed limb bows

cable guard – device designed to hold the cables away from the path taken by the arrow when it is drawn or shot

caliber – diameter of a firearm bore measured in hundredths or thousandths of an inch or in millimeters

cam – 1) an eccentric wheel with changing radius around its perimeter; 2) eccentric wheel designed to prolong the peak draw weight of the compound bow, altering its draw force curve to increase its efficiency

cam bow – two-wheel compound bow featuring cams rather than round eccentric wheels

cammed limb – limb design with cam action at the bases of the limbs rather than at their tips

cammed limb bow – bow design featuring cammed limbs

cant – holding the bow or firearm at a slight angle to the perpendicular

cap-and-ball – a revolver type intermediate between muzzleloading pistols and cartridge pistols where the cylinder consists of several short muzzleloading chambers with a cap at the rear

caplock – 1) lock designed for use with percussion caps; 2) a rifle or shotgun using a percussion lock

capper – a device used to hold percussion caps and press them into place on the nipple of a muzzleloader

cardinal rules of safety – three fundamental rules of firearm and archery safety including 1) empty and open with until ready to fire 2) muzzle or arrow pointed in a safe direction and 3) fingers off the string or trigger until ready to fire

cartridge arm – any firearm using fixed ammunition

center-of-mass hold – holding the aligned sights on the center of the bull or target, with the firearm or bow sighted to place the projectile at the top or center of the front sight

center-fire – a firearm using a primer or battery cup located in the center of the cartridge head

chamber – rear portion of the firearm barrel, shaped to hold and support a specific cartridge

chambering – v. milling or cutting the breech end of the barrel to the dimensions specified for the appropriate cartridge; n. 1) the process of cutting the chamber in a firearm; 2) the dimensions of the chamber on a firearm or the cartridge for which it was cut

change roles – coach and pupil exchanging responsibilities during coach-pupil instruction

channel – opening or tube

chilled shot – fine shot made with a hard lead alloy containing antimony or tin and antimony

checkpoint – any reference point used by the shooter to be sure the anchor point is properly located

checkering – n. 1) textured surfaces on the firearm stock, frame or hammer designed to increase the security of the shooter's grip; 2) individual diamonds or other patterns within the textured surface; v. cutting or pressing the textured surface on a firearm

choke – 1) a device or barrel structure designed to control the pattern of a shotgun, generally available in cylinder, skeet (or skeet1), improved cylinder quarter choke, skeet2, modified or half choke, improved modified, full and extra full; 2) the amount of choke present in a particular barrel; 3) losing concentration under pressure

choke tube – fixed or changeable sleeve containing a choke device

cleaning jag – fitted device attached to a cleaning rod designed to hold a cleaning patch securely and tightly in the barrel

clicker – spring-loaded device attached to the riser near the arrow rest to signal when the arrow has been drawn fully, often used by target shooters who suffer from target panic or freezing as a release signal

climbing block – a portable device used in climbing trees without penetrating the bark

clip – a removable box magazine for rifle, pistol or shotgun cartridges

clout – long-range target game featuring a large horizontal target in concentric circles around a central flag

cm – abbreviation for centimeter, 1/100 of a meter or approximately 0.4 inch

coach/pupil method – teaching technique where two shooters support and reinforce learning, switching roles after each portion of the shooting session

cock – “hammer” of a flintlock action

collet choke – variable choke device where the amount of choke constriction is controlled by turning a collet that controls the attitude of a set of steel fingers within the device

comb – upper edge of the butt stock, the part in contact with the cheek or face

components – elements or pieces that make up a whole, in hand loading it refers to the powder, primers and other items needed to create a new cartridge

composite – made up of several materials (fiberglass and graphite limbs, for example, are composites of those fibers in a plastic matrix)

composite limb – limb made of composite materials

compound bow – bow designed to give the shooter a mechanical advantage during the draw, changing the shape of the draw force curve and yielding a higher efficiency in energy transfer to the arrow

conical point – target point with an abruptly conical shape, tend to deflect more than bullet points when striking other arrows

constriction – difference between bore diameter and choke diameter in a shotgun

controlled access – restricting access to authorized and responsible persons

crimp – 1) folded seal on a shotshell or bank rifle or pistol cartridge; 2) slightly rolled or indented area at the neck of a rifle or pistol cartridge designed to hold the bullet in place

creep – 1) tendency of the drawing hand to ease forward from the anchor point during or prior to release, usually caused by fatigue or excessive draw weight; 2) movement of the trigger without releasing the sear

crest – lacquer indicia applied to the shaft between the fletching and the point and used to identify the arrow (see “signature”)

cresting lathe – mechanical device used in applying crests or signatures to arrow

crooked stock - butt stock with considerable drop at the comb and/or heel

cross hair – reticle consisting of a pair of hairs, wires or similar structures arrayed at right angles and centered in the sight

cup grease – heavy grease used to seal the mouths of the chambers in a cap-and-ball revolver

cushion plunger – adjustable and spring-loaded lateral arrow rest or side plate

cylinder pin – pin or post that supports the cylinders of a revolver

dead release – release without increasing tension in the back and shoulder muscles, in extreme cases while the drawing hand is creeping forward

deformation – alteration of the shape of bullets or shot, particularly due to acceleration, contact with the barrel or impact

degrees of choke – amount of constriction or choke in a shotgun barrel

desiccant – a drying agent

dock spike – a long, heavy nail used in construction of piers, docks and similar structures; useful as tent pegs and anchoring pegs for equipment

dot – reticule consisting of a small dot suspended on the intersection of nearly invisible cross hairs

double – shorthand expression for double-barrel shotguns, usually refers to side-by-side doubles

dram- unit of apothecary measure for volume, formerly used in measuring charges of black powder for shotshells

dram equivalent – a velocity or pressure measure giving shotshell performance equivalent to a specified amount of black powder

draw – 1) process of pulling the string back to the anchor point; 2) type of anchoring system used (such as Apache draw, high draw, low draw) cf. “anchor”

draw check – device used to signal when the arrow has been drawn to a consistent length, often **used** by target shooters to combat target panic or freezing (see “clicker”)

draw check arrow – marked arrow used to determine draw length or proper arrow length

draw force – force applied to the string in drawing the bow to full draw

draw force curve – draw force compared to the length of the arrow drawn, shape varies with bow design

draw length – distance from the string to the arrow rest when an arrow is fully drawn to the anchor point

draw weight – force required to draw an arrow to the anchor point

drop – 1) movement of the projectile toward the earth; 2) distance below the line of sight; 3) distance below an imaginary line extended along the rib or top of the barrel toward the butt stock

drop at comb – drop measured at the front of the comb

drop at heel – drop measured at the top of the heel

drop shot – soft lead shot containing pure lead or very soft alloys formed by dropping molten lead through a calibrated screen in a shot tower (as most fine shot is made)

dry point – pointing the shotgun at a target without firing or dry firing

duplex reticle – reticle composed of tapered posts or heavy cross hairs with fine cross hairs in the center

eccentric – wheel with the pivot point located off center so the effective radius changes as the wheel rotates

effective range – distance at which a projectile remains capable of performing its intended task, determined in rifles or pistols by a combination of remaining energy and trajectory, determined in shotguns by a combination of pellet energy and pattern density

ejector – device designed to automatically and completely remove a fired case from the chamber

empty mark – a mark on the ramrod of a muzzleloader indicating the depth of the empty barrel

end – a series of shots fired before the arrow are scoped or retrieved

energy – the physical measure of potential to do work, computed as one half the mass multiplied by the square of the velocity

escutcheon – a metal plate inset into the stock of a firearm, often used to reinforce a stress point of the stock

extra-full – chokes giving pattern densities in excess of 85 percent of the shot charge in a 30 inch circle at 40 yards

extractor – device designed to lift the cartridge from the chamber so the shooter can remove it manually

eyedness – having a dominant eye, one that takes precedence in aligning a sight (like a finger tip) with an object when both eyes are open and unobstructed

Fg – coarsest granulation of black powder used in shoulder arms

FFg – granulation of black powder used in bog bore shotguns and rifles

FFFg – finer grade of black powder used in small bore shotguns, pistols and rifles (.45 caliber and smaller)

FFFFg – finest black powder used in sporting arms, used only as priming powder for flintlock arms

face – 1) the belly of the bow, the part that faces the shooter when the bow is in shooting position; 2) a target

felt recoil – apparent recoil influenced by weight of the firearm, shooting position, stock design, action type and similar features

ferrule – cylindrical or tapered tube designed for attachment of one object to another, for example attaching a broadhead to an arrow

ferrule cement - a heat sensitive cement of low melting point used to attach ferrules to shafts

filed point – a heavy point with a more or less elongated tip of smaller diameter than the body of the point, often designed to match broadheads in mass or flight characteristics

fine shot – shot produced by dropping molten metal through screens in a shot tower, commonly from approximately 0.18 inches in diameter (BB) to 9.08 inches in diameter (#9)

finger pinch – tendency of the arrow to swing away from the rest during the draw, usually caused by cupping or curling the hand and cured by keeping the back of the hand flat during the draw

fire control – mechanical parts of the firearm that cause it to fire, including the trigger, sear, hammer, main spring and firing pins

firing point – a designated shooting station or location

fish-tailing – lateral oscillation of the shaft in flight, usually caused by improper spine, improper bow tuning, poor shooting hand form or misaligned nocks

FITA – Federal Internationale de Tir a l'Arc, the governing body for international, Olympic-style archery shooting using large, five color faces over known but relatively long ranges in open shooting fields

flange – 1) a rim or lip on a cylinder, 2) rim or edge on a scoring gauge

flash hole – channel from the priming pan of flintlock to the breech and main powder charge

flash pan – priming pan of a flintlock

fletch – 1) to apply fletching to an arrow; 2) the type or style of fletching materials used

fletching – feathers or vanes used to steer and stabilize the flight of an arrow

fletching cement – cement used to apply fletching materials

fletching clamp – clamp used to hold the fletching materials in shape and in place during application to the shaft

fletching jig – tool used to hold the fletching clamp in proper alignment with the shaft while the fletching is being applied

fletching style – number and placement of feathers or vanes, selected by considering trade-offs in speed, control, weather sensitivity, durability and noise in flight; common styles include vanes that are in line with the shaft (straight), angled across the shaft (angled), spiraled along the shaft (helical), or wrapped around the shaft (one type of flue-flue); usual numbers and placement involves three vanes at 120 degrees and the index vane perpendicular to the plane of the string and rest, four vanes at 90 degrees or 75 and 105 degrees, and six vanes at 60 degrees

flight -0 1) a group of shooters scheduled to shoot at the same time; 2) behavior of the arrow when it is actually in flight

flight line – path taken by a flying target or game bird

flight shooting – long range archery games where arrows are shot for maximum flight distance

flight arrow – a specialized arrow with minimal fletching designed for flight shooting

flint – extremely hard stone used in flintlock firearms and arrowheads

flintlock – 1) lock used on flintlock firearms, featuring a cock, flint, frizzen and flash pan; 2) firearm using a flint-and-steel lock

flu-flu – specialized arrow designed limited flight distance and often used in shooting flying targets, game birds or small game; use spirally wound full-length feathers or six full-length feathers to slow arrow flight

fly – connecting arm in the lock of a muzzleloader using double set triggers

follow through – 1) continuing the appropriate action of the shooting sequence through the shot until the target is struck, 2) holding the bow and string hands or the firearm in their release or shooting positions until the arrow or bullet strikes the target; 3) continuing the swing on a moving target until the target is struck

forearm – front portion of a stock on firearms with two-piece stock; forend or fore stock

forend – portion of a stock between the action and the muzzle, also called a forearm or fore stock

forend cap – metal or wood cap covering the extreme end of the forend

fouling – powder residue or bits of metal left in the bore or other parts of the firearm as a result of shooting

four position – rifle matches in which shooters fore stages from the prone, sitting, kneeling and standing positions

four-wheel bow – compound bow design featuring eccentric wheels and idlers to aid in developing mechanical advantages, usually feature less let-off at full draw than two-wheel bows

fowling piece – muzzleloading shotgun designed for bird hunting, usually double-barrel designs

frangible – easily broken into pieces; frangible bullets come apart with explosive results

free-floated barrel – rifle barrel that is firmly bedded at the receiver but does not touch the stock material for the length of the forend

freezing – experiencing difficulty in releasing the string when the arrow is drawn and a sight “picture” is developed, also known as target panic; sometimes used for other shooting problems, like releasing as soon as the sight or other reference point touches the target

frizzen – the hardened steel striking surface on a flintlock, produces sparks of burning steel when struck by the flint

frizzen spring – spring that holds the frizzen in place prior to firing and helps it direct the spark into the flash pan

full choke – choke device nominally delivering pattern densities of 70 to 80 percent in a 30 inch circle at 40 yards

gas check – a gilding metal or other hard metal band at the base of a lead bullet; permits higher velocities and pressures than possible with a lead bullet

gauge – standard shotgun borings, currently 10, 12, 16, 20, 28 gauges; formerly the number of bore diameter lead balls that could be cast from a pound of lead

lobe sight – an aperture front sight

glove – protective device for the shooting hand usually with individual finger stalls for the three drawing fingers

gold – bullseye or center of a five-color, FITA-style target

grain – unit of measure for bullet weight; one grain equals 1/7000 pound

grannulation – a grade or size of individual black powder granules

grip – v. to grasp or hold the firearm or bow in a manner that enables the shooter to control the arm; n. 1) the stock or handle of a handgun; 2) the area immediately behind the trigger guard on a rifle, musket or shotgun [see also straight or English grip, pistol grip]

grooves – the spiral channels cut into the bore of a rifle or a shotgun schoke

ground quiver – device that is set on or stuck into the soil for holding the arrows upright with the tips on the ground or protected in a tube

grounding – placing the bow on a rack or on the ground to indicate that the archer has finished shooting the arrows in that end

group – cluster of arrows or bullets shot with the same form, aiming point, sight setting and other factors to determine the average point of impact for that combination

half cock – a hammer position midway between the fired and fully cocked position, often used as a safety device

hammer – a spring-loaded striker that provides the force, directly or by transferring it to the firing pin, needed to detonate a primer, percussion cap, battery cup or priming compound in the rim of a cartridge

hang-fire – delayed ignition of ammunition or a muzzleloading charge

handle – grip portion of the bow

hauling line – light line used by bowhunters to raise or lower equipment when using an elevated stand

head stamp – identifying information on the head of a cartridge case

heel – the upper portion of the butt or butt plate of a long gun

high anchor – anchor point locating the nocking point near the corner of the mouth on the drawing hand side, often with finger touching the canine or eye tooth

high house – the target house on the left side of a skeet field from which the target emerges 10 feet above ground level

high house target – targets thrown from the high house on a skeet field

high velocity – term to signify velocities above target load levels in shotgun ammunition or above some minimum velocity (approximately 2500 feet per second) in center-fire rifles

high wrist – shooting style in which the bow-hand wrist is held in alignment with the forearm

hip quiver – arrow holding device designed to be worn on the belt

hold – 1) position of the aligned sights relative to the target or the intended point of impact; 2) relationship of the hands and archery equipment to the intended point of impact; 3) pause at full draw to check alignment, aiming point and form before release

hold over – holding the sights, sight pin or other reference point above the intended point of impact to compensate for projectile being below the line of sight at the distance to the target

hold under – holding the sights, sight pin or other reference point below the intended point of impact to compensate for the projectile being above the line of sight at the distance to the target

hooked breech – barrel attachment style in muzzleloaders where an extension of the breech plug hooks into a steel base mounted in the rear of the barrel channel, permits easy removal of the barrel for cleaning

hygroscopic – attracting moisture from the air

impact area – the area in which the projectile(s) struck the backstop or ground

improved cylinder – the most open or least constricted of the commonly used field chokes; nominally patterns about 45 to 50 percent of the shot charge in a 30-inch circle at 40 yards

indexing – 1) aligning the cylinder of a revolver with the forcing cone on the barrel; 2) aligning the plug of a scoring gauge with the hole made by the bullet

inert – deactivated, non-functional, incapable of action

inert ammunition – dummy ammunition or ammunition loaded with deactivated or non-functional materials; action-roving ammunition

IBO – International Bowhunters Organization, a governing body for 3-D (three dimensional) target shooting and other forms of shooting developed by bowhunters to test off-season skills

idler – wheel or pulley that changes the direction of a cable without altering the force applied

insert – 1) fitted unit that fits into the hollow shaft of an arrow to permit attachment of either a nock or a point; 2) blade fitted into a broadhead with replaceable blades; 3) small blades at right angles to the main blades on some broadheads (also known as “bleeder blades”); 4) elements in rifle sights that may be changed to suit the conditions or the shooter’s preferences

instinctive shooting – shooting without the aid of sights or other aiming devices on the bow

jacketed bullet – bullet composed of a lead core with a gilding metal or other harder metal bearing surface

jag – a cleaning device designed to hold a patch on the cleaning rod in a specific sized bore

jaws – top and bottom portions of a flinlock cock, designed to hold the padded flint securely

jerking - moving the trigger or shooting fingers with a brief, violent motion

judo head – specialized, spring-loaded head for roving or practice

jumping a target – anticipating the flight line of a shotgun target and moving the shotgun in that direction before the target emerges

kneeling – rifle shooting position; shooter sits on one foot or heel with the lower leg on the other side held vertically; the elbow of the forward hand rests on the knee providing support for the rifle

lacquer – tough paint used in archery application, often with an epoxy or vinyl base

laminated – layers of material bonded together to take advantage of the characteristics of the component materials

laminated limb – limbs composed of fiberglass or other composite materials on the surfaces with cores of wood

lands – raise, spiral ridges left when rifling is cut in a barrel

lanyard – cord attached to an implement to hold or operate it

laser sight – sight that projects a laser dot onto the target

laws of physics – fundamental relationships describing mass and movement of objects and the interactions of those factors

lead fouling – deposits of lead left in the bore of a firearm

length of pull – distance from the butt to the trigger

limb – flexible portion of the bow from the riser to the tip

line of flight – path taken by the arrow in flight

line of sight – straight line from the eye, through the sight to the target

live release – releasing the string while increasing the tension in the back and shoulder muscles (pulling the shooting elbow back), indicated by the shooting hand moving backward along the face or neck on the release

loaded mark – mark on a muzzleloader ramrod to indicate the barrel is properly loaded

loading port – opening through which a firearm may be loaded, usually serves as an ejection port as well

loading ram – lever activated rod on a cap-and-ball revolver that serves as a seating device for the ball

lock – mechanical parts of a muzzleloader or other firearm

lock plate – flat plate upon which the parts of a muzzleloader lock are assembled and held in place

longbow – straight or slightly reflexed bow based upon the old English design; sometimes used in fish and game regulations to designate all bows with the exception of crossbows

low anchor – anchor point locating the nocking point under the chin

low-house – trap house on the right side of a skeet field (station 7) from which the target emerges 3 ½ feet above ground level

low-house target – targets thrown from the low house on a skeet field

low wrist – shooting position in which the shooting forearm is relaxed, allowing the hand to be pushed upward by the pressure of the bow against the palm; position favored by target shooters

lubricated wad – fiber or felt wad treated with a lubricant

m – abbreviation for meter, the base unit of length measure in metric units; approximately 10 percent longer than a yard

machining – cutting or milling metal to specified dimensions

magazine – 1) part of a firearm where ammunition is stored prior to being inserted into the chamber for firing; 2) a controlled storage area for ammunition or components

magnum shot – very hard shot made with a lead alloy containing a high percentage of antimony

main spring – the spring that is cocked to provide energy to the hammer or firing pin

malfunction – failure of a firearm or ammunition to perform as designed; legally defined in the rules of shooting games

matching chokes – process of selecting the appropriate choke for the intended use of a shotgun

matchlock – 1) firing mechanism where a match is inserted into a touch hole to ignite the powder charge; 2) firearm using this type of lock

Maxi ball – flat-based muzzleloader bullet developed by Thompson Center Arms

micrometer – measuring device using a graduated dial or set of dials to obtain precise measurements

micrometer sights – aperture rear sights or externally adjusted telescopic sights with micrometer-style, graduated adjustment knobs that permit precise sight adjustment

milling – machining process where metal is removed to form the appropriate part or dimensions

minnie ball – conical bullet for muzzleloading arms developed in the mid-nineteenth century

misfire – failure of a cartridge, percussion cap or powder charge to fire

mimetic – mimicking or practicing a process without actually performing the act; practice steps without shooting

mm – abbreviation for millimeter, 1/1000 of a meter or approximately 0.0394 inch

modified choke – shotgun choke patterning approximately 55 to 65 percent of its shot charge in a 30-inch circle at 40 yards; also known as half choke

module – integrated operating element of a firearm, like a trigger group or fire control mechanism

momentum – physical measure of inertia, the mass multiplied by the velocity

musket – smooth bore muzzleloading firearm suitable for use with either shot or ball

muzzle – terminal end of the bore, opening from which the projectile or projectiles emerge

muzzle control – maintaining adequate control of the firearm so the muzzle is never pointed at anything the shooter does not intend to shoot

name tent – folded card used to identify the person sitting at that location

nipple pick – tool for cleaning the opening or channel in the nipple of a muzzleloader

nipple wrench – tool designed to remove or replace a nipple

nitro card wad – heavy treated paper cut to shape and used as an over-powder wad in shotguns

notch or v-sight – open rear sight using a notch or a V-shaped slot as a reference point for sight alignment

NAA – National Archery Association, the governing body for FITA-style shooting and Olympic archery in the United States

NFAA – National Field Archery Association, governing body for indoor and outdoor archery shooting using both conventional and compound bows in the United States

nock – 1) slotted device at the end of an arrow to receive the string; 2) slots in the ends of conventional bow limbs to anchor the string

nocking point – location where the arrow is placed on the string

nocking point indicator – device for maintaining the proper nocking point on the middle serving of a string, commercial and homemade types available

NRA – National Rifle Association, the governing body for rifle, pistol and international shotgun shooting in the United States

NSSA – the National Skeet Shooting Association, the governing body for American skeet in the United States

NSSF – National Shooting Sports Foundation, a trade organization of the arms and ammunition manufacturers in the United States dedicated to the promotion of shooting sports

ogive – curved surface at the front of a bullet

open sight – rear sight with a flat or curved upper surface with or without a notch or groove as a reference point

optical sights – sights using lenses with or without magnification

over-powder wad – wad used to seal the bore and contain the gases produced by the burning powder

over-shot wad – wad used in muzzleloading shotguns or roll-crimped shotshells to keep the shot in place until the charge is fired

palm-rest grip – pistol shooting grip where the supporting hand is cupped under the shooting hand

Partridge sight – sights using a rectangular notch in the rear sight and a flat-topped, rectangular blade for a front sight, often used on pistols

patch box – inletted cover on the side of a muzzleloader stock used to carry a small supply of patches or other materials

patch knife – a small knife used to trim patching materials when using a muzzleloading rifle with patched round balls

pattern – cluster or cloud of projectiles fired from a shotgun using shotshells

pattern control – use of chokes, buffering materials or loading techniques to modify the pattern of a shotgun

PBA – Professional Bowhunters Association, a bowhunting organization with a high ethical standard

peep sighting – rear sight consisting of a perforated disk through which the front sight is viewed, also called a receiver or aperture sight

pellets – 1) projectiles developed for use in pellet rifles and pistols, consisting of a hollow-based lead cup; 2) shooter's synonym for shot in shotshells

penetration – 1) depth to which a projectile will travel in a given substance before stopping, a measure of energy and momentum; 2) complex intersection of momentum, diameter, point characteristics and the medium; 3) bowhunters term for the arrow's ability to reach the vital organs of the quarry and exit the far side

percussion cap – hollow cup of copper or gilding metal containing a small amount of pressure sensitive explosive, used to ignite the powder charge in percussion or caplock firearms and cap-and-ball revolvers

peripheral vision – wide angle vision, seeing objects on the edges of the visual field

pilot hole – hole bored into hard materials to start a screw

pistol grip – downward curved gripping surface immediately behind the trigger guard on many firearms

pivot arm – operating arm on a spring-powered trap

plinking – shooting at safe and legal targets of opportunity; informal shooting

plucking – pulling the fingers away from the string rather than relaxing them and letting string roll away from them, a release form fault

point of impact – location at which a projectile strikes another object or the surface of the earth

Pope and Young Club – organization that maintains records of bowhunting

porpoising – undulating (vertical oscillation) movement of an arrow in flight, usually indicates a form fault or improper bow tuning

possible bag – bag or pouch used by a shooter to carry all the equipment and materials that he or she “might possibly need”

post – reticle using one or more pointed or flat-topped sighting devices

powder charge – amount and type of powder used in a particular load

powder flask – a non-sparking metal flask used to carry a supply of black powder

powder horn – cow horn modified as a carrying device for black powder

powder measure – calibrated volumetric device for measuring charges of powder

press – 1) act of pulling the trigger back smoothly to fire the arm; 2) device for putting tension on bow limbs to relieve the pressure on the string; 3) tool used in hand loading ammunition

priming flask – small flask for carrying and dispensing small charges of priming powder

priming pan – part of a flintlock containing the priming powder

prone – rifle shooting position where the shooter lies belly down on the ground, supporting the rifle with the arms braced firmly on the ground

projectile – object like an arrow, bullet, shot or stone propelled by mechanical, pneumatic or chemical forces

punch – tool used to transfer the energy of a hammer or similar instrument to a small area

Pyrodex – black powder substitute developed by the Hodgdon Powder Company

query – a question or request

quiver – device to hold arrows

ram – rod or other device moved by mechanical, pneumatic or hydraulic pressure within a given course of zone of travel

range – 1) safe shooting area; may be further defined by the rules of formal shooting games; 2) maximum distance a given projectile may travel; 3) distance to a target; 4) effective shooting distance of a projectile, firearm or bow

range layout – design of a shooting range

range officer – person responsible for the safe operation of a shooting range

range rod – heavy ramrod for use at a fixed location

range staff – persons assisting the range officer while conducting shooting on a shooting range

receiver – part of a firearm to which all other parts connect; housing for the action, fire control and safety mechanisms

receiver sight – aperture rear sight or peep sight

recoil – reaction of the firearm to the force of a projectile being fired; expression of Newton’s law: for every action there is an equal and opposite reaction

recoil control – stock construction, action design, structures or mechanical devices designed to reduce the amount of felt recoil or to spread it over a longer time frame

recoil pad – hollow or solid attachment to the butt of a firearm used to cushion the recoil

record shot – shots fired at the scoring surfaces of a target

recurve bow – conventional bow with the tips of the limb curved toward the back of the bow

reflexed limb – limb that angles toward the back of the bow when the bow is unstrung

release – 1) permitting the bowstring to return to its resting position, firing an arrow; 2) handheld mechanical device to fire the bow

reloading – handloading, remanufacture of ammunition from basic components

report – firing noises produced by a firearm

reticle – sighting device or structure

rifling – spirally arranged lands and grooves that impart a spin to the projectile or modify the dispersal of shot

rifling process – cutting grooves in the interior of a firearm bore to create rifling

rim – flange at the base of a cartridge case; may be used as a location for a priming compound (rimfire cartridges) or for headspacing and extraction purposes

rimfire – cartridge with priming compound sandwiched between the layers of a folded rim, fired by striking the rim and crushing the priming compound between the metal surfaces

riser – central portion of the bow, including the handle or grip

SAAMI – Sporting Arms and Ammunition Manufacturer's Institute, the industry-supported organization that sets standards for the sporting arms and ammunition industry

Sabot – a split sleeve to hold a bullet or ball

St. Charles quiver – hooded quiver worn in the center of the back and permitting the arrows to be removed from the bottom of the quiver

Scattergun – term used for shotgun

screw-in adapter – 1) device permitting quick change of points having threaded shanks; 2) accessory attachment points on the riser of the bow

sear – interlocking surfaces that hold a mainspring, hammer, firing pin or similar device in place until released by moving the mating surface

sear spring – spring that holds a sear in place

self bow – bow built as a single unit

semi-automatic (semi-auto) – self-loading firearm design in which some of the energy developed by the fired cartridge is used to operate the action; may be operated by gas or recoil

semi beavertail forend – forend intermediate in design between the beavertail and splinter designs

serving – windlings placed on a bowstring to protect the string loops and the center portion of the string and to provide a smooth surface for a cleaner release

set trigger – trigger used to activate a hair-trigger sensitivity on a firing trigger in a double-set trigger arrangement

shaft – body of an arrow

shaft spider – tracking device inserted in a hunting arrow that leaves a trail of fine thread to aid in game recovery

shaving lead – leaving small shavings or splatterings of lead around the forcing cone of a cap-and-ball revolver

shooting range – 1) safe place to shoot; 2) shooting field or location developed according to the rules of a specific event

shot charge – weight of shot in a shotshell

shot cloud – airborne shot charge or shot cluster

sight – device to assist in aligning the eye with the bore or bow and pointing the aligned system at a target

sight bar – vertical post allowing for elevations adjustment

sight extension – horizontal bar extending the sighting radius for more precise sight alignment

sight picture – combination of a properly aligned set of sights and a target

sight pin – post, pin, or other shape used as the actual sighting device

sight window – cutout area on a bow to permit the arrow a straighter path to the target and to permit the use of a sight

sighting ring – ring around the bulls used for sighting shots

sighter – shots fired to determine and adjust sight settings

sighter bull – bull used for sight adjustment

signature – personalized indicia on the shaft just beyond the fletching to identify or beautify the arrow

silhouette shooting – shooting games where metallic silhouettes are the targets and knocking them over is the criterion for success

silencer – device designed to reduce noise by dampening vibrations of the string or cables or by muffling the report of fixed breech firearms

sin – arrow falling short of the target

single stage trigger – normal single trigger

sitting – shooting position when the shooter sits on the ground supporting the elbows with the knees

six o'clock hold – hold where the bull is situated at the top of the front sight (like a “pumpkin on a post”) in order for the projectile to strike the center of the bull

skeet – 1) format shotgun shooting game conducted on a nearly semi-circular field with eight shooting stations around the perimeter and targets thrown from either end of the base chord; 2) shotgun choke producing patterns of about 35 to 40 percent of the shot in a 30-inch circle at 40 yards, also known as skeet 1; 3) skeet 2 chokes fire tighter 9(nearly modified) patterns

skirt – hollow rear portion of a pellet

slap -1) arrow striking the cables, riser or rest on the release resulting in fish-tailing; 2) string striking the inside of the forearm or elbow of the bow hand, usually indicating pronation of the shoulder or improper elbow rotation resulting

slide – external operating parts of a semi-automatic pistol

sling – 1) strap used to carry a firearm or steady it in some shooting positions; 2) strap used to hold the bow in the shooter’s hand on release of the arrow

smoothbore – firearm lacking in rifling

snap caps – inert devices designed to fit a firearm chamber and permit it to be “fired” releasing the tension on the springs without damaging the firing mechanism

snatching – jerking the trigger to make the firearm fire while it seems to be lined up with the intended point of impact

spin wing- light plastic vane with a curled edge used by many target archers

spine – stiffness of the shaft, a feature of its materials, length, diameter, mass wall thickness and accessories

spritzer – sharply pointed bullet with a tangent or secant ogive

splinter forend – thin forend or fore arm found on many side-by-side double shotguns

sprue – small projection left when a cast round ball is molded

squeeze – act of pressing the trigger straight back with steady pressure until the firearm goes off

squib load – grossly under-powered load

stabilizer – counter-weight(s) attached to the bow to dampen vibrations during release

stadia wires – multiple cross hairs used as a range finding device in some optical sights

stalker quiver – hip quiver designed to protect broadheads from damage and the shooter from broadhead injuries

standing – shooting position where the shooter stands upright and supports the firearm with the arms and shoulder alone

starter – see ball starter

station – shooting position or location on a shotgun field: trap has five stations, skeet has eight

statistical officer – individual handling the scores and reporting for a shooting event

statistical office – location of the statistical officers

string – 1) bowstring; 2) series of shots fired with the same sight setting and hold; 3) series of shots fired in accordance with the rules or the orders of the range officer

string hand – drawing hand, the hand on the same side as the dominant eye

string hand side – the dominant-eye side of the body, bow or target

string jig – device used for making bowstrings

string nock – notches cut in the tips of the bow’s limbs to hold the string in place

string peep – aperture rear sight anchored in the upper part of the bowstring

string silencer – device to reduce string vibrations and string noise on shooting

string tracker – any of several tracking devices used by bow hunters to aid in recovering game animals

stock – wooden or composite materials acting as a handle for the firearm

straight-aways target – target flying on a line directly away from the shooter

straight grip – firearm grip or wrist that follows the straight line from the toe to the trigger guard; also known as an English grip

straight stock – butt stock with relatively little drop at the comb or the heel; tends to recoil nearly straight back and to pitch the shots somewhat high; commonly used on trap guns

sustained lead – shotgun lead obtained by maintaining a set gap between the shotgun and the target (towing the target along with the shotgun)

swing through lead – shotgun lead obtained by starting behind the target, accelerating through it and firing as the muzzle clears the front of the target

tab – protective device for shooting fingers, composed of one or more layers of material
take – process of rendering game animals into the possession of the hunter; broadly defined by most game agencies

take-down bow – bow that permits the limbs to be removed from the riser for transportation or storage; also permits use of different weight limbs or replacement limbs

tang – metal extension of the action, trigger guard, receiver, breech plug or other part bedded into the stock

tang lever – operating lever of a sing-shot or double-shot firearm

target back – reverse side of the target from the one with the bulls printed on it

target panic – inability to release the bowstring when the arrow or sight is properly aligned with the target

telescopic sight – optional sight with or without magnifying lenses, adjusted wither internally or externally and containing a reticle or sighting device

thimble – cylindrical support structure on a muzzleloader to hold the ramrod

three position – shooting match including stages fired from the prone, stand and kneeling positions

thrower arm – cushioned arm that propels clay targets from a trap

thumb-lock grip – pistol shooting grip where the fingers and thumb of the supporting hand are wrapped over the fingers and thumb of the shooting hand

tight group – obviously compact cluster of shots fired with the same sight setting, sight alignment and sight pictures and demonstrating proper form

toe – bottom edge of the butt of the firearm

touch hole – the opening in a matchlock arm where the match was inserted into the powder charge

tracking the target – moving the firearm along the flight path of the target

trade gun – smoothbore muzzleloader used as a trade item during the fur trade era

trajectory – the curved flight path of the arrow or other projectile

trajectory curve – path of a projectile in flight relative to a line of sight

trap -1) a device for throwing a clay target; 2) a formal shooting game

trap field – field properly set up for shooting trap

tree sight – specialized sight that compensates for the downward angle of the bow when shooting with the arm lowered rather than extended straight from the shoulder

triangulation – using a series of three or more “shots” to determine the prevision of a shooter’s sight alignment

trigger – lever used to release a sear and fire a firearm

trigger control – 1) keeping the finger off of the trigger except during a shot; 2) pressing the trigger straight back through a firing sequence without disturbing the sight alignment and sight picture

trigger guard – protective device surrounding the trigger

trigger plate – metal plate that controls the orientation of the trigger

true draw length – distance from the string to the far edge of the arrow rest

tumbler – device in a muzzleloader lock that permits the hammer to fall on firing

two-wheel bow – compound bow design featuring eccentric wheels or cams at end of both limbs and without idlers, usually features more let-off at full draw than a four-wheel bow

uncalibrated – having divisions that are of unequal or unknown units

white bull – record bull that has not been fired upon or hit by a shot, usually associated with failure to fire at a bull and firing at another bull more than once

vane – 1) individual piece of fletching material; 2) plastic fletching material

vernier peep - an adjustable peep or receiver sight used on long range or target muzzleloading rifles and adjusted on a vernier scale

wad – material used to seal a bore, to cushion a shot charge or projectile or to prevent shell components from moving within the case, usually made of treated paper (card wads), fiber, felt or plastic

wad column – total array of wads in a cartridge or charge

web – portion of hand between the base of index finger and the base of thumb

wedge pin – see barrel wedge

wheel lock – 1) firearm lock using a spring-loaded, serrated w against a pyrite flint to produce a shower of sparks and ignite a priming powder charge; 2) a firearm with a wheel lock action

whip finish – winding a strand of material over itself to lock the end in place, usually accomplished by winding the material over a loop of strong material, tucking the end of the wound material through the loop and pulling the loop out, drawing the material under itself

wobble area – area through which a firearm moves during sighting and firing

worm – spirally twisted metal pins used for retrieving patches or swabbing the bore with cleaning patches when using a muzzleloader

wrist – the narrow portion of the stock at the grip

zone of fire – the danger area ahead of the muzzle, just be safe before any shooting equipment can be discharged safely

