

A Proposal to Legalize the Use of Air Rifles Meeting Certain Specifications for Hunting Game Birds When Rifles Are Legal

Proposed By:

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This proposal would have the FW Commission declare air rifles that meet certain specifications as a legal means of take for upland gamebirds when rifles are a legal means of take (mountain grouse and turkeys in fall).

Several avenues exist to legalize the use of air rifles.

- An act of Montana Legislature to directly permit the use of air rifles or to redefine rifles to include air rifles. However, this would usurp the powers of the FW Commission, would not allow as much public input and would be more difficult to change if needed.
- Petition to change ARM Rules to allow the use of air rifles for taking upland game birds. This would allow public input but would require considerable time and effort by FWP.
- The FW Commission could use its legal authority to specify air rifles of certain specifications are a legal means of take for upland game birds when rifles are legal. (Preferred Method)

Issue/Problem Statements

- Rifles are legal to take certain upland game birds: mountain grouse and turkeys in the fall. There are no restrictions on the rifles that may be used.
- Turkeys are overabundant in some locations, especially some semi-rural residential areas. Landowners many times restrict hunter access due to concerns over safety and noise (gun shots) that disturbs neighbors.
- Mountain grouse are often shot out of trees, raising safety concerns where rifle bullets might land.
- Fish, Wildlife and Parks currently does not allow air rifles, citing a BATF definition that states rifles propel a projectile with an explosive charge.

I. Proposal

- FW Commission would approve use of air rifles meeting certain criteria as a means to take mountain grouse and turkeys (fall) when rifles are a legal means of take under the authority of MCA 87-1-301 (6) (a) and (e) and MCA 87-6-401 (g) and (h).

Potential Wording

- **Means of taking:** Blue, Ruffed and Franklin's Grouse and turkeys during fall may be taken with a shotgun not larger than a ten gauge; a long, recurve or compound bow and arrow; a crossbow; a rifle; a handgun; or a .177 caliber air rifle shooting a pba pellet at least 1250 feet per second or a .22 caliber air rifle shooting a pba pellet at least 950 feet per second.

II. Background

Turkeys have become overabundant in many rural subdivisions across Montana but hunting is often restricted by landowners concerned about safety and noise (gun blasts) so attaining adequate harvest is difficult. Mountain grouse are commonly and incidentally shot by big game hunters, sometimes with large caliber rifles aimed at birds in trees.

Air rifles are an old technology dating back to the 16th century, Lewis and Clark took an air rifle on their expedition for hunting. Air rifles have more recently become technologically advanced, some are capable of killing deer and wild pigs as well as smaller game. Air rifles use compressed air, nitrogen or CO₂ to propel their projectiles. The air may be compressed by a pump, a spring-piston activated by break-barrel action or lever or a pre-primed gas cartridge.

Air rifles of certain specifications (.177 caliber shooting a pba (performance ballistic alloy) pellet at least 1250 feet per second (fps) or .22 caliber air rifle shooting pba pellet at 950 fps) reach power equivalent to .22 rifles. However, due to lighter weight (5 to 15 grains compared to 29 to 40 grain .22 caliber bullets), air rifle pellets lose momentum quicker and do not carry as far. Modern air rifles are very accurate and often have built-in noise suppressors so they are quieter.

For comparison, the Daisy Red Ryder BB guns (.177 caliber) most of us grew up with shoot 7-8 grain BBs at 300 fps. The next level of air rifles typically cost about \$75 and shoot .177 caliber pellets at 400 to 800 fps, good for plinking and small pests.

Higher power air rifles are moderately expensive, costing \$120 to \$200, and achieving velocities approaching .22 caliber rifles. There are also large bore air rifles ranging from .25 to .50 caliber capable of killing big game and legal in a number of states for deer and wild pigs. These air rifles cost hundreds of dollars.

Allowing the use of certain air rifles for gamebirds when rifles are legal might open more areas to turkey hunting (improved harvest), would be safer (pellets do not carry as far as bullets), and quieter but would still provide humane harvest of game.

The FW Commission is restricted by the Legislature (MCA 87-1-301) in how it can regulate firearms and ammunition for hunting. MCA 87-6-401 specifically says only certain birds can be hunted with a rifle. FWP Enforcement used that wording and the BATF definition to ban air rifles, even though they have the same function and power as rifles.

III. Definitions and Authority

Bureau of Alcohol, Tobacco and Firearms (BATF) - Defined Under: 18 U.S.C., § 921(A)(7) and 27 CFR § 478.11

The term "Rifle" means:

"A weapon designed or redesigned, made or remade, and intended to be fired from the shoulder and designed or redesigned and made or remade to use the energy of the explosive in a fixed metallic cartridge to fire only a single projectile through a rifled bore for each single pull of the trigger."

However, it should be noted that the energy of the explosive referred to is a chemical reaction which creates a layer of compressed air as a shock front, followed by a high pressure area composed of gaseous products from the detonation to propel the projectile. In other words, chemically compressed air and gases as opposed to mechanically compressed air and gases in an air rifle.

MCA 87-1-301

(6) The commission may not regulate the use or possession of firearms, firearm accessories, or ammunition, including the chemical elements of ammunition used for hunting. This does not prevent:

- (a) the restriction of certain hunting seasons to the use of specified hunting arms, such as the establishment of special archery seasons;
- (b) for human safety, the restriction of certain areas to the use of only specified hunting arms, including bows and arrows, traditional handguns, and muzzleloading rifles;
- (c) the restriction of the use of shotguns for the hunting of deer and elk pursuant to 87-6-401(1)(f);
- (d) the regulation of migratory game bird hunting pursuant to 87-3-403; or
- (e) the restriction of the use of rifles for bird hunting pursuant to 87-6-401(1)(g) or (1)(h).

MCA 87-6-401 (prohibited actions)

(g) use a rifle to hunt or shoot upland game birds unless the use of rifles is permitted by the department. This does not prohibit the shooting of wild waterfowl from blinds over decoys with a shotgun only, not larger than a number 10 gauge, fired from the shoulder.

(h) use a rifle to hunt or shoot wild turkey during the spring wild turkey season.

IV. Ballistics

Basically, there are no restrictions on rifles used for mountain grouse and fall turkey. You can use anything from a .22 reduced velocity short to a .416 Rigby.

<u>Pellet/Bullet</u>	<u>Pellet/bullet Wgt.</u>	<u>Avg. Velocity</u>	<u>Muzzle Energy</u>
# 6 shot (1 pellet)	1.99 grains	1400 fps	9 ft. lbs.
#4 shot (1 pellet)	3.12 grains	1400 fps	14 ft. lbs.
# 2 shot (1 pellet)	4.38 grains	1400 fps	19 ft. lbs.
.22 short	29 grains	605-1105 feet/second (fps)	24-79 ft. lbs.
.22 long	29 grains	700-1215 fps	32-95 ft. lbs.
.22 long rifle	30-40	1016-1640 fps	69-239 ft. lbs.
BB gun (.177)	5 grains	350 fps	1.4 ft. lbs.
.177 air rifle	7.9 grains	1250 fps	27.4 ft. lbs.
.177 air rifle	7.9 grains	1400 fps	34.0 ft. lbs.
.22 air rifle	14.3 grains	950 fps	29.0 ft. lbs.
.22 air rifle	14.3 grains	1250 fps	50.0 ft. lbs.
.22 air rifle	14.3 grains	1500 fps	71.0 ft. lbs.

V. Discussion

Air rifles may be preferable to rimfire or centerfire rifles in some situations. Mountain grouse are commonly shot from trees. An air rifle pellet does not have the profile, ballistic coefficient or mass to carry as far as a rifle bullet so it can be safer. The same principle applies to hunting wild turkeys in an urban setting.

Also, air guns are not as loud as rifles or shotguns which can be unsettling to landowners and neighbors. Due to increased safety and reduced noise, air rifles may be more acceptable than rifles or shotguns to some landowners to allow hunting and help reduce some urban turkey populations.

I have a Crossman Nitro Venom Dusk .22 caliber air rifle equipped with a noise suppressor and a 4x32 scope that shoots a pba pellet at 950 fps. I am able to shoot it in my backyard without my neighbors noticing. I can put 5 pellets into a turkey head target at 30 feet, a common distance for urban turkeys.

Lacking ballistic gel, I conducted several test on penetration. Setting two plastic milk jugs full of water side by side, the pellet consistently penetrated through the first jug and into the second jug. I was able to shoot a pellet through 1/2" and 5/8" plywood but not completely through 3/4" plywood. The pellet will completely penetrate a pine 1x4 board (3/4" actual thickness). I have been able to kill several turkeys with just one or two #4 or #2 shotgun pellets. I am confident a pellet out of my .22 caliber air rifle will kill as effectively and humanely with head or body shots.

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<https://www.pyramydair.com/airgun-map/>