

## Chapter 9

# AIR GUN TRAINING



### Objectives

- Identify legal air guns for hunting in NJ
- List four types of air guns
- Identify where to aim for a vital shot on small game
- Learn how to unload an air gun

Since fall 2013, small game hunting with air guns has been allowed for rabbit and squirrels during the regular small game seasons. NJ firearm laws consider air guns as firearms. A firearm purchaser's ID card is required to buy one within the state. Remember, all of NJ's state firearm laws pertain to air guns too. As with any firearm, air guns need to be handled with great care and respect. One needs to remember and obey the three primary safety rules.

- 1. Treat every firearm as if it were loaded.**
- 2. Keep the muzzle pointed in a safe direction.**
- 3. Know your target and behind.**

### What Do I Need to Go Hunting with an Air Gun in New Jersey?

Air guns of .177 caliber through .22 caliber (including .20 cal/ 5mm) will be allowed as long as the minimum muzzle velocity is at least 600 feet per second. NoBB's will be allowed. The air gun needs to be loaded with pellets. Wadcutter, domed/pointed and hollow point designed conical style pellets are all permitted. To hunt in NJ, one will need a basic firearm hunting license. NJ Hunter Education requirements for the basic firearms have not changed. Students will still be required to safely handle and shoot a shotgun in the field portion of the class. When hunting with the air gun, the standard firearm safety zone of 450 feet and

wearing a minimum 200 square inches of hunter orange will also apply. Like all firearms, air guns while in transport need to be unloaded and in a secured case.

## How Does an Air Gun Work?

Unlike most modern firearms that ignite gun powder to create a rapid expansion of gas, an air gun uses stored compressed air (or CO2) to propel the bullet down the barrel. Air guns have come a long way in recent years. Some of the modern air guns are now performing with muzzle velocities greater than the speed of sound at speeds of 1400 feet per second and faster. Air guns that are allowed for hunting in NJ are broken down into four general categories:

1. **Pneumatic**
2. **Spring Operated**
3. **CO2**
4. **Pre Charged Pneumatic**

### Pneumatic



Gun is pumped by hand (generally 10 pumps) to compress air stored in a cylinder. When gun is fired, all the compressed air is released propelling pellet down the barrel. This firearm needs to be pumped by hand between each shot.

*Positives* - Inexpensive

*Negatives* - Pressure fluctuates depending upon how many pumps you do.  
- Takes time to reload

- Slower than other types of air guns

### Spring Operated



One pump, by breaking the barrel of the firearm, compresses a spring. While shooting, the spring pushes a cylinder of air down the barrel. The spring needs to be re-cocked in between each shot.

*Positives* - Only one pump to reload.

- Consistent pressure with every shot

*Negatives* - Firearm is usually heavy

- Spring will get damaged if dry fired.

### CO2 Powered



Compressed CO2 is stored inside a cartridge. Every time you squeeze the trigger, a small amount of CO2 is released propelling pellet down the barrel.

*Positives* - Quick to reload

*Negatives* - CO2 is affected greatly by

temperature 1000 psi @ 85

degrees F 500 psi @ 32 degrees F

### Pre-Charged Pneumatic (PCP)



Uses extremely high pressured air (up to 3000 psi) stored in a tank loaded off a scuba tank or specialized hand pump. Every time you squeeze the trigger, a small amount of compressed air is released propelling pellet down barrel.

*Positives* - Quick to reload

- Compressed air acts the same at any temperature
- Generally the fastest air gun available

*Negatives* - Expensive

## Where to Aim

Since air guns don't have nearly the amount of shock power that a shotgun has, shot placement becomes extremely important. To successfully harvest a squirrel or rabbit with the air gun, a precise head shot is recommended. This means excellent marksmanship and keeping the shots close. Thirty yards and closer are the shots you are looking for. Before considering hunting, you should be able to consistently group your shots within the size of a quarter for the .22 caliber and groups the size of a nickel for the .177 caliber air gun. While pointed pellets are more aerodynamic and might group better, flat or hollow point pellets offer greater knock down power. You will need to experiment with your firearm at the range to find out what pellet works best.

## Unloading an Air Gun

The air gun is unlike most other modern firearms where you simply open the action to unload the gun. Most air gun manufactures recommend the gun be shot to unload it. This can simply be done by shooting into a safe backstop while still in the woods. Remember, it is illegal to carry a loaded firearm into the 450 foot safety zone of a dwelling or school playground.

Whether you are a first time hunter or seasoned vet, the air gun has many possibilities in NJ's fields and woods. Many experts compare the air gunner in the firearm world to the traditional archer in the bow world. To be successful, both require self-imposed limits to make accuracy count on close range game.

