## **Velocity, Energy & Trajectory**

The table below compares velocity (in feet per second), energy (in foot pounds) and trajectory (in inches below or above line of sight) of a 22 rimfire and a 22-250 centrefire at 100 and 200 metres.

	100 m velocity	200 m velocity	100 m energy	200 m energy	100 m trajectory	200 m trajectory
22-250	3280	2920	1315	1040	+1.9''	-1.2''
22 rimfire	1000	620	90	58	-5.6''	-29.8''

The minimum recommended point of impact energy required to effectively harvest a coyote is several hundred foot pounds of energy. The vital area on a coyote is just five inches wide, and most coyotes are harvested at ranges beyond 100 metres.

Ammunition chosen for coyote-hunting rifles generally consists of lightweight, thin-jacketed, hollow-point bullets designed to rapidly disintegrate on impact to minimize pelt damage and reduce ricochets.

Under authority of the coyote shooting licence, hunters are also permitted to use shotguns with #2 or larger shot (BBB or buckshot is commonly used).

Shotguns can be effective when using calling techniques. A coyote will often attempt to circle downwind of a hunter, occasionally presenting a close shot at a running target.

## Safety

It is vitally important that hunters participating in any hunt follow basic safety precautions to ensure a safe and enjoyable experience. Small-calibre centrefire rifles are long-range firearms.

Always be aware of your target and what is beyond your target. Never use full metal or non-expanding bullets. These are illegal and prone to deflection. Never hunt near cabins, dwellings or communities. Regulations require a person to be at least 300 metres from a dwelling before discharging a firearm. If hunting on or near a farm, be sure to have the landowner's permission, and be aware of any livestock or buildings in the vicinity.

## Remember and practice the four ACTS of firearm safety:

**Assume** your firearm is loaded

**Control** the muzzle at all times

**Trigger** finger OFF the trigger until ready to fire

**See** (prove) the firearm is unloaded

#### **Ethics**

All wildlife deserves our respect, and hunted and trapped species deserve to be harvested in a humane and efficient manner. Coyotes are adaptive animals with keen senses and great survival skills – hunters should respect them and not let negative impressions of coyotes based on rumor, hearsay or disdain cause errors in judgment.

#### **Hunting Techniques**

Coyote hunting is a new and exciting opportunity for hunters in Newfoundland and Labrador. Coyotes' evolved skills and senses make them challenging animals to hunt, but at least two coyote traits – an extremely vocal nature and desire to eat just about anything – make them vulnerable to certain hunting techniques.

Baiting is considered to be an effective hunting technique. Hunters place food,

such as animal carcasses or meat scraps, in an area with good visibility and then conceal themselves downwind nearby to wait for a coyote to take the bait.

The most popular coyote hunting method is calling. Coyotes, also known as song dogs, are very vocal, especially at dusk and predawn. Two types of calls – imitation calls and distress calls – can be employed either individually or in combination.

Imitation calls are designed to mimic the coyote's various vocalizations, and include a male challenge call, female mating call, locating calls, alarm calls, and others. Using a basic coyote howl, hunters can attempt to elicit a response from a given area to confirm the presence or absence of coyotes. The effectiveness of various coyote calls varies from season to season. Once a response is achieved, hunters can continue with the imitation call or switch to another type of call, such as a prey in distress call.

The sound of prey in distress is, to a coyote, much like ringing a supper bell, and can be effective year-round. Common coyote prey in Newfoundland and Labrador includes hares, mice, squirrels, and various birds. Mimicking the sound of these animals under distress may be as simple as using

your hand to make a squeaking sound, or blowing a commercial distress call.

Coyote-calling devices include commercial or homemade electronic calls, and handheld calls. Electronic calls have greater range and are easy to use, but are often bulky and difficult to transport. Handheld calls have less range but are economical and mobile.



When making a "stand" for coyote calling, conceal yourself well, use camouflage, and limit movement during the call sequence, which usually lasts no more than 15-20 minutes. Hunters should educate themselves on various strategies used to call and hunt coyotes before purchasing a call or choosing specific hunting techniques.

#### If You Are Successful

Hunters have a responsibility to use what they harvest. Coyote pelts may be sold commercially, and animals should be pelted and the pelts prepared properly. The Wildlife Division continues to collect coyote carcasses to use in gathering scientific information, and pays for submitted carcasses.

#### For more information, contact:

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> Website: www.gov.nl.ca



in Newfoundland & Labrador

**Biology, Management & Harvest Strategies** 



Wildlife Division



# **Coyote: the New Predator**

Coyotes (Canis latrans) have successfully colonized most of North America By the 1970s, coyotes had occupied much of North America. By the 1980s, over the past 100 years. Their rapid range expansion from the open prairies of western North America has resulted in a nearly total occupation of all confirmed coyote on the Island of Newfoundland was a pup, hit by a car available forested and open habitats in Canada and the US. Localized extinction of wolves, land clearing, development, and agricultural practices are likely contributing to their success.

coyotes were common in Nova Scotia and Prince Edward Island. The first near Deer Lake in August 1987. By the mid-1990s, coyotes were confirmed throughout most of Newfoundland, and later in Labrador.

#### **Description**

An eastern coyote weighs about 25 to 40 pounds. Its black-tipped, bushy tail is generally carried below the horizontal line of its back. Ears are pointed and erect. Coat color can vary, but is generally tawny gray with black tips. A coyote's legs, paws and long, pointy muzzle are reddish-yellow, and the throat, belly, and inside of its ears are white. When a coyote runs or lopes, it places its back foot in the print made by its front foot, creating a single line of generally straight prints. Front feet are slightly larger than the back, and the shape of the pads is different.

## Biology

Coyotes mate for life, but will choose a new mate if a partner is lost. Mating occurs from February to March. Females will bear three to 12 pups after an approximately 60-day gestation period from late April to mid-May. Litters of up to 18 pups have been recorded.

Pups begin learning to hunt at 10 weeks and leave their parents in late fall to hunt on their own. Young coyotes may stay with their parents during the first winter, but will leave to establish their own teritory before new pups are born.

#### **Coyote Research**

Wildlife research and management officials have documented coyote expansion on insular Newfoundland and are investigating the diet, age structure and reproductive rates of coyotes using carcasses submitted mainly by hunters and trappers.

The ecological implications of an additional predator on insular Newfoundland's ecosystem are being investigated, especially relating to caribou and other wildlife. These efforts include radio-collaring and tracking both coyotes and caribou.

## **Coyote Management**

Coyote management in Newfoundland and Labrador involves addressing predation on livestock and big game animals, and providing recreational and economic benefits to trappers and hunters. Other initiatives are educating hunters, trappers and the public about coyote biology, management and harvest, and how to avoid problems with coyotes.

Concerns about coyote predation on other wildlife populations have led to misconceptions about how best to manage coyote populations. Total eradication of coyotes from insular Newfoundland is not a viable option. Such efforts undertaken elsewhere in North America have been unsuccessful.

## **Current Management Strategies**

A trapping season for qualified trappers runs from Oct. 20-Feb. 1. Trappers may also shoot coyotes using centrefire rifles up to .225 calibre.

> Small and big game licence holders may harvest coyotes under authority of their licence, and within hunting areas valid under that licence. Hunters may use the firearms permitted under their particular licence, and during the period of time the licence is valid. A big game licence is valid until an animal is harvested, or the season closes.

A permit to shoot coyotes may be issued to individuals who experience specific coyote predation on livestock or other domestic animals.

A coyote shooting licence is designed for people with a specific interest in hunting coyotes. The season runs from the second Saturday in September through the second Saturday of the following July.

## **Coyote Shooting Licence**

As with all hunting, coyotes must be harvested humanely. Firearms permitted under the authority of a coyote shooting licence ensure humane harvesting practices.

Regulations state: "the holder of a coyote shooting licence may hunt, take, or kill coyote with a centrefire rifle not greater than .225 calibre, or a shotgun using shot size #2

#### Firearms and Ammunition

There is a distinct difference between a rimfire 22 and small-calibre centrefire rifles, often called centrefire 22s.

Most coyote hunters and ammunition manufacturers do not consider rimfire 22s adequate for harvesting coyotes, and these firearms are not permitted under the province's coyote shooting licence.



The photographs above show the visual difference between rimfire 22s and centrefire 22s. Photo 1 shows the 22-calibre rimfire cartridge to the left of a variety of centrefire 22s, including a 222 Remington, a 222 Remington Magnum, a 223 Remington, and a 22-

250 Remington.

Small-calibre centrefire rifles have a distinct primer located directly in the centre of the bottom of the cartridge, as seen in **Photo** 2, while the primer in a rimfire cartridge is located throughout the entire

The rimfire cartridge is not legal, but the others are.

Other examples of centrefire rifles not greater than .225 include the 17 Remington, 218 Bee, 22 Hornet, 220 Swift, 225 Winchester, 223 WSSM, and the 204 Ruger.