

# Coyote

*Canis latrans*

By Errin Armstrong

The word “coyote” is derived from the Nahuatl word *coyotl* and among the Aboriginal peoples of the American Southwest, the coyote is known as “the Trickster.” Some stories declare the coyote the creator of the human race, others describe the way it stole fire for humans, and still others portray the wily animal as playing various pranks and tricks. Also known as the “prairie wolf” or “brush wolf,” the coyote is a member of the canine family and closely related to the wolf and the domestic dog.

The Latin name *Canis latrans* translates as “barking dog.” Falling somewhere between the lone wolf and the sociable dog in temperament, coyotes spend much of their time alone but will occasionally gather in small packs. They are highly intelligent and adaptive animals and can be found living anywhere from desert scapes and prairies to forests, mountains, and even urban areas. Coyotes are native to North America and are found nowhere else in the world, although they are related to the jackals of Europe, Africa, and Asia.

Despite its prevalence, the coyote is an elusive animal rarely seen by humans. Its presence is often felt and heard in rural areas and occasionally noticed in urban centres, but it is primarily a secretive creature of the plains, mountainsides, and forests. It is an intelligent and capable hunter, a caring parent to its pups, and an active communicator among its kind. Although without official protection and seen by many as a nuisance, the coyote is a resilient inhabitant of North America and has worked its way into many of our oldest legends and most interesting stories.

## Characteristics

The coyote has long, thick fur, generally a grey to tan colour but ranging from yellowish brown to reddish and in higher elevations darker. In rare cases, black coyotes have been spotted. A coyote’s belly is lighter in colour and can be nearly white. Its tail is bushy and generally has a black tip, although white tips are also known to occur.

The coyote has a slender build, with males being slightly larger than females. In size, it falls between the fox and the wolf and is comparable to a medium-sized domestic dog – all closely related species. In weight the coyote ranges from 6.8 to 20.4 kg (15 to 45 lbs), with desert-dwelling specimens often weighing less than half of those living at higher elevations. An average weight is 13.6 kg (30 lbs) for males and 11.3 kg (25 lbs) for females. An average male coyote will span about

1 m (39.4 in) in head and body, with a tail of approximately 30 cm (12 in). It is generally about 45 cm (18 in) high at the shoulder.

The coyote has features similar to those of the domestic dog and the wolf. It has long, pointed ears, a narrow face, and a slender nose. Its eyes are yellow or amber and it has round, black pupils. It has excellent hearing and its prominent ears are held erect. The coyote's tail is full and bushy; it falls straight out and slightly below the level of its back. Its coat is about 7.5 cm (3 in) long on the back, although it has a slightly longer patch between the shoulders, which is known as its "mane" or "hackles." The coyote has 42 teeth, including four long incisors.

Coyote tracks are dog-like, although the footprint is slightly narrower. The coyote has five digits on its forefeet and four on its hindfeet, and it walks with only its toes touching the ground. Its footprint is oval in shape and shows four toes and claw marks. The front feet are larger than the rear feet and have a larger pad. Coyotes follow trails and old roads and, unlike the dog or the fox, will follow a straight path across an open area rather than wandering or following aspects of the landscape.

## **Life Cycle**

Coyotes mate for life, with new mates taken only upon the death or removal of one of the pair. The annual mating period runs from January to March, with most coyotes mating in February. At the beginning of the mating season, several male coyotes will court a lone female, and she will choose one of them as her partner. Mating can begin at one year of age but generally takes place at closer to two years. Once the female has given birth, the male coyote attends her in the den, bringing food for her and for the pups as they mature. Coyotes are also able to breed with wolves and with domestic dogs. A coyote-dog mix is called a "coydog."

Coyotes breed once per year; pups are born from April to early May when food is readily available. The gestation period is approximately 60-65 days. Litters range anywhere from two to a dozen pups (typically five to seven) depending on population densities and other variables.

Coyote pups are born blind and open their eyes at about two weeks. They emerge from their natal den for the first time shortly after this and live in the den until they are six to 10 weeks old, when their mother begins to take them out hunting. The pups begin eating semi-solid food after about three weeks and are weaned at five to seven weeks old. The father brings regurgitated food to the den as the pups are old enough to eat it. Only five to 20 per cent of coyote pups survive their first year.

By autumn, coyote pups are generally hunting on their own, and the family begins to disband. Within a year young coyotes have set off alone to stake their territory and start their own families. Coyotes live up to 15 years in the wild, although they are considered old at 10 to 12 years of age and often live to only half that.

## **Habitat**

The coyote originally inhabited western North America but has been steadily increasing its range over the past two centuries. The human-induced decline in wolf populations has contributed to this expansion, as have changes to the landscape resulting from human occupation. Coyotes now thrive from ocean to ocean across North America and south through Mexico to Panama. In Canada, coyotes are found from British Columbia north to the Yukon and Northwest Territories and east to the Maritimes. They are known to exist in at least 46 U.S. states and may soon be present in all states but Hawaii.

Although their natural habitat is open grassland, coyotes are highly adaptable creatures and can also survive in forests, farmlands, brush country, deserts, mountains, and marshlands. They can even adjust to urban and populated areas and are sometimes found in parks, alleyways, and yards within city limits.

Coyotes generally dig their own dens but will sometimes take advantage of natural holes and crevices as well as burrows made by other animals. A coyote den typically contains an underground nesting area at the end of a wide-mouthed tunnel; it is used for sleeping and for birthing and raising pups.

Coyotes are known to be territorial and maintain their territories by marking them with urine. Males range much further than females: a mature male will establish and patrol a territory of up to 50-65 square km while females generally stay within an 8-12 square km area. Male territories will often overlap with the territories of other male and female coyotes, while female territories are distinct from one another. Territories grow larger as the food supply becomes sparser and may be abandoned altogether during severe food shortages. In times of abundance, several family units may inhabit the same area for a short time. Young coyotes typically leave their families at the end of the calendar year to seek a mate and establish their own territories. In times of population density a young male coyote may have to travel up to 160 km to claim a piece of available land.

## **Behaviour**

The coyote is primarily carnivorous but does eat fruit, berries, and vegetables along with a diet of small mammals and rodents (such as rabbits, mice, and ground squirrels), birds, snakes and even insects and reptiles. It is known to eat carrion and will also hunt through garbage for food. Although the coyote does not subsist on domestic animals and birds, it does consume them on occasion. Sheep, calves, and chickens are particularly tempting and relatively easy prey.

Coyotes are not drawn to fertile farmlands in search of livestock alone, however; they play an important role in containing destructive rodent populations in farming areas.

Although coyotes normally hunt alone, they occasionally come together in a pair or small group to hunt larger animals. Fawns are favourite targets, and even deer and antelope can be vulnerable in deep snow conditions. In pack hunting, coyotes engage in relay running over long distances – striking only when their quarry is exhausted. They can run as fast as 65 km per hour and can maintain a speed of 56 km per hour while chasing prey. The coyote's sensory perception is highly developed, and its sense of sight, smell and hearing are excellent. It is a skilled hunter in both the daylight and at night and is an extremely clever strategist. It will track and then stalk prey for 20-30 minutes before pouncing; it is known to catch fish and to forage for eggs along water edges; when hunting in pairs, one will distract the prey while another sneaks up on it from behind; and it is even known to ambush ground squirrels by lying in wait at a burrow's exit while a badger digs its way in at the entrance.

Coyotes are largely nocturnal but do emerge on occasion during the day. They are elusive creatures and, although common, are rarely seen. Coyotes do not hibernate; nor do they migrate – although they will travel outside their territorial boundaries when food is scarce or population too dense. The coyote is an extremely adaptable animal and can change its diet, socialization patterns, and even its breeding habits to survive in wide variety of habitats.

Coyotes exist within a social order, with certain individuals maintaining dominance over others. They communicate mood and rank through movement and positioning of their ears. They live in pairs, build dens together and jointly care for their young and at times cooperate in pairs and groups in hunting.

Coyotes can be heard howling at night, to announce their presence and communicate with other coyotes in the area. A lone coyote's howl warns other males to keep their distance and avoid potential conflicts while inviting females to join him. Coyotes will also howl in unison and reply to other coyote, wolf, or dog howls. Along with howling, coyotes may emit a series of short, high-pitched crying yelps at night. Yelping enables them to communicate among a small group of coyotes and is often heard among playing pups and juveniles. A coyote's bark is understood to be a protective display when communicated in a den or at a kill, and a huffing noise is made when calling quietly for pups.

## **Threats**

The coyote is largely unprotected and has been extensively hunted, trapped, and poisoned for bounties. Yet despite deliberate efforts to reduce the population, its numbers are still strong throughout North America; its range and habitat continue to increase due to deforestation and other changes in the natural landscape.

Humans are by far the most significant threat to the coyote population. Coyotes can cause significant damage to livestock, and their activities can result in millions of dollars in losses for farmers and ranchers. They will also prey on domestic cats and dogs in urban areas and can be dangerous if they become habituated to people. Some hunters blame coyotes for a decline in game species and this provides further incentive for human control of the population. As well, because coyote coats become long and silky in the winter, they are often trapped for their valuable pelts.

Although coyotes are rarely killed by other wild animals, natural predators include wolves, cougars, bears, eagles and dogs – with juveniles being particularly vulnerable to attacks.

### **What We Can Do to Help**

- Coyotes are most dangerous when they come to rely on people or populated urban areas for food. Food left outside for pets is an easily preventable lure and pets themselves can be at risk of attack if not monitored. The British Columbia Wildlife Act classes the coyote as “dangerous wildlife” and states that it is an offence to intentionally feed or attempt to feed dangerous wildlife. It is also an offence to leave food, food waste or other substance to attract dangerous wildlife.
- Farmers and ranchers must be wary of coyotes, but should remember that coyotes can play a valuable role in controlling destructive rodent populations. As predators of agricultural pests, coyotes can help to preserve the balance of nature.
- The coyote is not under government protection in British Columbia. Under the *Wildlife Act Designation and Exemption Regulation*, it falls under the “small game” and “fur bearing animal” designation, which means it can be legally hunted and trapped in British Columbia.
- Protect your pets. If you own a cat or small dog, remember that they could be at risk if a coyote is in the neighbourhood. Large dogs are less vulnerable but should be discouraged from coming into contact with a coyote.
- If you see a coyote in your neighbourhood, do nothing to attract it or make it feel welcome. Don't leave open garbage, pet food, or rotting fruit around.
- If a coyote approaches you and looks aggressive, stand up, shout and wave your arms at it. Throw a rock. Don't turn your back or run away. Call for help!
- Aggressive coyotes should be reported to a parks or wildlife office.

### **Web Resources**

Animal Planet –

<http://animal.discovery.com/guides/mammals/habitat/tempgrassland/coyote.html>

*A one-page summary with a photo*

BC Adventure – <http://www.fishbc.com/adventure/wilderness/animals/coyote.htm>

*A one-page summary with a photo*

Canadian Encyclopedia –

<http://www.canadianencyclopedia.ca/index.cfm?PgNm=TCE&Params=A1ARTA0001981>

*A very brief entry plus a couple of photos and a distribution map showing range*

Canadian Museum of Nature – <http://www.nature.ca/notebooks/english/coyote.htm>

*Only a very short description*

Co-Existing with Coyotes – <http://www.coexistingwithcoyotes.ca>

*A two-page illustrated brochure by Vancouver's Stanley Park Ecology Society*

Desert USA – [http://www.desertusa.com/june96/du\\_cycot.html](http://www.desertusa.com/june96/du_cycot.html)

*A very comprehensive account of the coyote including many interesting facts and an audio clip of the howls, yelps, and other coyote sounds.*

Online Etymology Dictionary –

<http://www.etymonline.com/index.php?search=coyote&searchmode=none>

*Brief entry on the origin of the word 'coyote'*

Wildlife Act – [http://www.qp.gov.bc.ca/statreg/stat/W/96488\\_01.htm](http://www.qp.gov.bc.ca/statreg/stat/W/96488_01.htm)

*Detailed regulations of the British Columbia Wildlife Act*

Wildlife Act: Designation and Exemption Regulation –

[http://www.qp.gov.bc.ca/statreg/reg/W/Wildlife/168\\_90.htm](http://www.qp.gov.bc.ca/statreg/reg/W/Wildlife/168_90.htm)

*Detailed regulations of the British Columbia Wildlife Act*