

Florida Wilderness Safety Manual
Vol 6
Coyote
(*canis latrans*)

Disclaimer

This manual is solely intended for self-instruction and serves as a guide for enhancing knowledge about predatory animals.

However, it is crucial to acknowledge that the potential dangers associated with these animals are not to be taken lightly. The risk of encountering a predatory animal in close proximity is real and should never be underestimated. While this manual aims to provide information and strategies for navigating potential encounters with predators, it is essential to emphasize that these animals possess formidable instincts and capabilities that can pose a significant threat to human safety. Therefore, it is paramount to exercise extreme caution and vigilance when venturing into areas where predatory animals may be present. Always prioritize personal safety and be prepared to respond appropriately to potential threats.

It is important to note at the outset that this manual does not in any way, shape, or form supersede any laws. This means that any laws that are currently in effect and applicable to the situation at hand will continue to take precedence over the information and guidelines provided in this manual. It is essential that all users of this manual familiarize themselves with the relevant laws and regulations that govern their specific circumstances and comply with them fully.

This manual is intended to be a useful resource and guide for individuals and organizations seeking to understand and implement best practices in a particular area. However, it is not a

substitute for legal advice or counsel. The information contained within this manual should not be interpreted as such, and users should consult with a qualified legal professional whenever they have questions or concerns about how to comply with the law.

This manual is intended to serve as a comprehensive guide for assistants who are responsible for ensuring safety in high-risk remote areas. The manual is designed to provide practical advice, guidance, and best practices for assisting in the management of safety in these challenging environments.

Although this manual provides comprehensive information and guidance, it is crucial to emphasize that it does not constitute a comprehensive guarantee of safety. The user must always prioritize their own safety and take appropriate precautions beyond those outlined in the manual. Factors such as individual circumstances, environmental conditions, and specific applications can introduce unforeseen hazards that cannot be fully anticipated or addressed within the scope of this manual.

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Introduction

Coyotes, scientifically known as *Canis latrans*, are medium-sized carnivorous mammals native to North America. They are members of the Canidae family, which includes dogs, wolves, and foxes. Known for their adaptability and resilience, coyotes have successfully expanded their range and are now found in a variety of habitats, from forests and deserts to cities and suburban neighborhoods.

Coyotes are typically slender and bushy-tailed, with a grayish-brown fur coat that can range in color from reddish to almost black. They weigh between 20 to 50 pounds on average, with males

being slightly larger than females. These animals have a distinctive howling vocalization that can often be heard echoing through the night, which is one of their most characteristic and well-known features. Their diet is highly varied, consisting of small mammals, birds, insects, fruits, and even human garbage.

Remarkably, coyotes have thrived despite human encroachment on their habitat. Their urban populations have been successful due to their intelligence and ability to adapt to changing environments. They are skilled hunters, opportunistic feeders, and have even been known to learn from each other in their social groups. Coyote sightings in urban areas, while usually peaceful, have become common, as these adaptable creatures live in close proximity to human settlements. However, conflicts can arise over food sources and safety concerns, especially with pets.



Chapter 1



Physical description:

A medium-sized wild dog native to North and Central America, is a creature of both strength and grace. Lightly built for agility and stamina, it stands between 18 and 26 inches (46 to 66 cm) at the shoulder, and their body length typically ranges from 31.5 to 46 inches (80 to 117 cm), including the tail, which adds an average length of around 16 inches (41 cm). They weigh from 20 to 50 pounds (9 to 23 kg), with males usually larger than females.

Coyotes are predominantly grayish-brown to yellowish-red in color, with darker patches on their feet, back, ears, and tail. Their muzzle is

often a darker shade, providing a distinctive appearance. The fur is thick and bushy, especially in winter, to protect them from the cold. During summer months, it becomes thinner. Coyotes have keen senses, characterized by sharp hearing and excellent sight, which help them in their nocturnal and crepuscular hunting. Their eyes are amber in color and positioned on the front of the head, improving depth perception for stalking and chasing prey.

One of the most notable features of the coyote is its head. It has large, erect ears which it uses to pinpoint the location of prey as well as predation threats. Its narrow snout is designed for precision in biting and holding prey. The coyote's canine teeth are long and sharp, perfect for puncturing, while its molars are suited for crushing and tearing. The jaw strength and flexibility of a coyote allow it to consume various types of food, including small rodents, rabbits, birds, fruits, and more.





Coyote Vs. Wolves:

Coyotes and wolves are often thought of in the same breath due to their similarities as members of the Canidae family. However, a closer examination reveals a range of differences between the two species. One of the most noticeable differences lies in their physical appearance. Coyotes are significantly smaller than wolves, resembling a larger version of a domestic dog. They typically weigh between 20 and 50 pounds, whereas wolves can weigh up to 175 pounds. The coyote's fur is also distinct, featuring a blend of grays, browns, and reds, with some black-tipped hairs.

In terms of habitat, coyotes have adapted to thrive in a wide variety of environments - from the deserts to the forests, and even in urban

spaces. This adaptability has allowed them to expand their range throughout North America. Conversely, wolves have specific habitat requirements and are more commonly found in the wilderness regions, including dense forests, tundra, and the like. Their broad distribution has been shrinking due to factors like human encroachment and hunting.

Behaviorally, coyotes are more opportunistic than wolves. They often live independently or in small family units, displaying a more solitary hunting nature. Wolves, on the other hand, are known for their pack mentality and cooperative hunting strategies. This lifestyle is more complex and social, involving hunting larger prey like elk or caribou in coordinated attacks.

When it comes to diet, both wolves and coyotes are omnivores, but their eating habits vary significantly. Coyotes are more versatile eaters, feeding on small mammals, insects, fruits, and scavenged food. Their omnivorous diet allows them to survive in many environments. Wolves have more of a carnivorous oriented diet, specializing in large prey, which requires them to live in larger packs for successful hunts.



Chapter 2



Anatomy

Coyotes are medium-sized mammals belonging to the canine family. Their body structure is a testament to their evolutionary history, mirroring that of other canids like wolves and dogs.

The head of a coyote is relatively broad and rounded, featuring pointed, erect ears that stand high on the head. These ears are not just aesthetically distinct but serve a critical function in their survival. Highly sensitive, they allow coyotes to detect the faintest rustles in the leaf-litter, indicative of prey movement. The

eyes are almond-shaped and set forward, aiding in their predator lifestyle by providing binocular vision for depth perception and a wide field of view.

Coyotes possess a canine muzzle, which houses both the nose and mouth, significant organs for survival. The nose is a vital tool, playing a crucial role in detecting prey, water sources, and other coyotes. The sharp sense of smell is always at work in a coyote's life, essential for finding food, identifying territory, and mate selection. The mouth houses powerful jaws and teeth, with sharp canines and molars designed for tearing and crushing food, respectively. This dental configuration facilitates the efficient processing of meat-rich diets that constitute the coyote's eating habits.

The body of a coyote is streamlined and robust, designed for stamina and agility in pursuit of prey. The forequarters are muscular, testament to their hunting prowess. The hindquarters, on the other hand, are more powerful, carved for explosive take-offs and high-speed chases. Their four legs have bushy brown and white/black paws with sharp, non-retractile claws suitable for digging and grasping prey. They support a coat-tailed body, with a crest of longer, non-shedding, and coarser guard hairs that run along the top of the spine, adding to their distinct appearance.

Every aspect of a coyote's anatomy, from their musculature to their sensory organs, is an evolutionary marvel carefully honed for their habitat and predatory lifestyle.



Size

The coyote, a member of the canidae family, is typically medium-sized among the wild canids found in the Americas. Adult coyotes often weigh between 20 to 50 pounds (9 to 23 kilograms), with males generally being larger than females. Their body length, from head to the base of the tail, averages from 3.3 to 4.5 feet , while the tail can add an additional length of around 1.6 to 2 feet. Standing on all four legs, a coyote's height at the shoulder is usually about 2 feet. These dimensions vary based on environmental factors, specifically diet and habitat. For instance, coyotes in more arid regions might be smaller due to food scarcity compared to their counterparts in more temperate or urban environments, where food sources are more abundant. Their versatile size is one of the many reasons why coyotes are able to adapt to various habitats, from deserts to forests and even urban areas, making them one of the most successful and ubiquitous wild canids on the planet.



Intelligence

Coyotes are renowned for their high intelligence, demonstrating behaviors that are sophisticated, adaptable, and cunning. Their problem-solving abilities are impressive, primarily due to their ability to alter their diet, behavior, and habits based on their environment and available resources. This flexibility could be attributed to their generalist niche - they make homes everywhere, from busy urban environments to untouched wilderness, and their ability to successfully hunt, scavenge, eat pets, and invade human territories without being detected or harmed is a testament to their cognitive capabilities.

Coyote intelligence is rooted in their social structures, which allow them to cooperate, communicate, and show empathy toward one another.

They are communal beings, hunting in teams, protecting family units and working together to create multiple dens for protection. They use various vocalizations and body language to convey complex information, and these complex interactions indicate a high degree of intelligence.

Moreover, coyotes display a great amount of tool usage, which is often used to define intelligence in other animal species. They have been observed using rocks to dislodge insects from crevices, using human-trash piles as hunting grounds, and using roads as pathways. Coyotes adjust their hunting strategies when prey patterns shift; they can track and take down prey bigger than themselves and utilize strategic hunts such as surrounding prey or driving them into dead ends.

The intelligence of coyotes also has implications for their survival and human-coyote interactions. This sharp intelligence allows them to understand and adapt to human environments, resulting in their unexpected resilience in sprawling cities across the globe. This high intellect allows them to harmoniously coexist with humans, often undetected, despite their predatory nature. Despite posing a potential threat, their intelligence can be channeled to benefit the cohabitation with humans by promoting conservation efforts, education about their behavior, and understanding their hunting and bonding patterns. Their intelligence has made them one of the most adaptable and ubiquitous wild animals on Earth.



Eyes and Eye Lids

Coyote Eyes is both a term and a concept that evoke imagery deeply rooted in the oral traditions, folklore, and narratives of various Native American tribes, majorly the Navajo. This topic refers to the concept of wisdom, adaptability, and sometimes, trickery, which a coyote is often associated with in Native American mythology. Coyote Eyes can be deciphered as the ability to see through the facade, the keenness to perceive beyond the obvious, and the wisdom to understand the complex layers of reality.

In Native American legends, the Coyote is frequently portrayed as a trickster figure who not only causes chaos and misleads others but also brings about important changes by its cunning and wit. An animal that is ordinarily shunned by many can, in turn, be looked upon as a carrier of wisdom, learning, and growth. These tales often highlight the significance of a coyote's wisdom and experience, which indirectly teaches the reader or listener to proceed with the same shrewdness and adaptability. Its eyes, thus, symbolize this knowledge, perception, and acuity.



Ears

Coyote ears are fascinating features that contribute significantly to these animals survival in a variety of habitats. Typically, coyotes sport large, pointed ears that can swivel independently to capture even the faintest of sounds. These ears are crucial for their survival as they enhance the animal's auditory capabilities, allowing them to detect predators or prey from a considerable distance. The shape of the ears also helps in regulating their body temperature; in the sweltering heat, they can flatten their ears to retain heat and during colder temperatures, they can perk them up to release heat.

Moreover, coyote ears assist in non-verbal communication as they can express various moods and signals through the position of their ears. For example, if a coyote is on high alert, its ears will be alert and perked forward to aggressively focus on its environment. When relaxed or playful, their ears may appear flatter and leaned back. Additionally, when they feel threatened, their ears may be lowered and potentially behind their heads as a passive sign to avoid confrontation.



Teeth

A Closer Look at an Intricate Canine Feature Coyotes, known for their adaptability and dominance in various ecological niches, have a remarkable set of teeth that are crucial to their survival. These canines are equipped with a specialized dental structure that allows them to process a wide range of foods, making them successful predators and opportunistic feeders. In terms of function and design, coyote teeth embody the perfect blend of form and function for their predatory lifestyle.

Coyotes, scientifically known as *Canis latrans*, have a total of 42 permanent teeth, which include

four sharp and powerful canines used for gripping and killing prey. These canines are elongated and robust, providing noteworthy strength and a significant puncturing capability. The canines are complemented by a set of incisors for cutting, and a series of premolars and molars that are perfect for crushing, tearing, and tearing flesh apart. The molars in particular are built to withstand the crushing force needed to crack open bones, while the sharp edges of the premolars are designed to shear through meat.

In their natural habitat, coyotes primarily eat small to medium-sized animals, including rodents, rabbits, and even fish. The exceptional design of their teeth enables these creatures to easily grip and efficiently dissect these meals. Moreover, as omnivores, they will also consume fruits, vegetables, and fallen fruits from trees, allowing a varied diet that ensures strength and robust health. In this way, coyote teeth have evolved to meet the demands of a diverse diet, providing an advantage in a variety of environments.





Body

This mammal's body is built for survival and efficiency in movement. Its body structure is reminiscent of a smaller, more agile version of a wolf, which it is closely related to, exhibiting a slender build with long legs, pointed snout, and large, erect ears.

Its fur is a protective and adaptive feature, varying from shades of grey to reddish-brown, and its thick insulating properties act as a defence against the cold. The underbelly is often a lighter hue, aiding in its camouflage capabilities. For coyotes, this camouflage is vital, whether they are hunting small animals in the dense shrubbery or evading predators in wide open spaces.

The coyote's head is proportionately smaller than a wolf's but larger than a red fox's, with a distinctive black mask. Its elongated muzzle contains powerful jaws and sharp teeth, perfectly suited for seizing, tearing, and consuming its prey. An interesting adaptation about coyote's ears is their ability to move them independently, enhancing their auditory capabilities and helping them keenly sense the environment around them.

While the coyote's hind legs are longer than the front, which enables them to leap long distances for hunting or escaping from a threat. The feet of a coyote are smaller, with broad, rough pads that offer grip and cushioning when running over rocky or spiky terrain. They also contain sharp, curved claws that provide additional support during sprints or while holding down prey.





Tail

The coyote tail is a fascinating anatomical feature that plays a crucial role in the behavior and communication of these remarkable canids. Generally, a coyote's tail, which is bushy and relatively thick, not only aids in balance while navigating the various terrains they inhabit but also serves as an important tool for conveying messages to other coyotes. Its unique structure, tipped with black at the end, differentiates it from many other species and can be spotted easily, particularly as coyotes often hold their tails down when moving through the landscape.

Coyotes use their tails in several ways to communicate. For instance, when coyotes greet each other, a lowered tail typically indicates submission and respect for the other individual. Conversely, when they raise their tails, it can signal aggression or dominance. This body language can be critical in establishing hierarchies and avoiding unnecessary confrontations among these

social animals. Moreover, during mating season, coyote tails play a part in attracting potential partners, as coyotes often engage in elaborate courting dances where tail movement and gestures are integral components of their mating ritual.

Another interesting function of the coyote tail is in temperature regulation. The bushiness of the tail allows coyotes to wrap it around their bodies, particularly their nose and face, for insulation during colder nights, demonstrating an intelligent adaptation to varying environmental conditions. In hot climates, coyotes may also use their tails to aid in cooling by increasing air circulation and dissipating heat. This versatile appendage is thus an essential part of a coyote's survival kit, contributing not only to their vitality in wild ecosystems but also to the rich tapestry of behavior that has fascinated researchers and wildlife enthusiasts for years.





Paws & Tracks

Coyote tracks and paws reveal fascinating details about these adaptable and elusive creatures, providing insights into their movements, hunting patterns, and territorial behaviors. Their footprints, often compared to dog tracks, are usually more elongated and compact, with a distinctive three lobed pattern on the front pads. The hind foot is typically larger than the front foot, with clear prints that offer visual impressions of their contact with the ground. These tracks can vary in size from 2 to 3.5 inches in length for the front paw, and the hind paw may range from 3 to 4 inches in length, showcasing the physical adaptability of these animals.

In snow or soft, muddy terrain, coyote tracks can reveal not only the direction of their movement

but also their pace and activity levels. A walking coyote leaves a line of prints with the hind foot often overlapping the front foot, creating a pattern that appears as if the animal is walking in its own bootprints. When running, the layout of the tracks changes significantly, as each hind foot will print forward relative to the front paw that stepped before it, which forms the characteristic bounding pattern.

Coyote tracks, when studied closely, can tell stories of nocturnal hunts, daytime scavenging, and territorial marking. Their presence in suburban areas can often be determined by tracks left behind, serving as a reminder of the animal's uncanny ability to thrive in close proximity to humans. Examining the ground on which these prints are left can reveal more than just the simple presence of a coyote, it can tell us about their interaction with the environment, their hunting strategies, and their ability to traverse a wide variety of landscapes, from dense forests and open fields to urban backyards and suburban parks.





Fur

Coyote fur is a fascinating and versatile natural material that has been historically valued for its durability, warmth, and decorative qualities. Its distinctive characteristics, such as a dense undercoat and long guard hairs, provide natural insulation against cold temperatures, making it a sought-after material in the fashion and home

goods industries. The pelts have a versatile coloration, typically ranging from grayish-brown to a reddish-brown hue, featuring darker, almost black, accents towards the end of the guard hairs, which lends a unique aesthetic appeal.

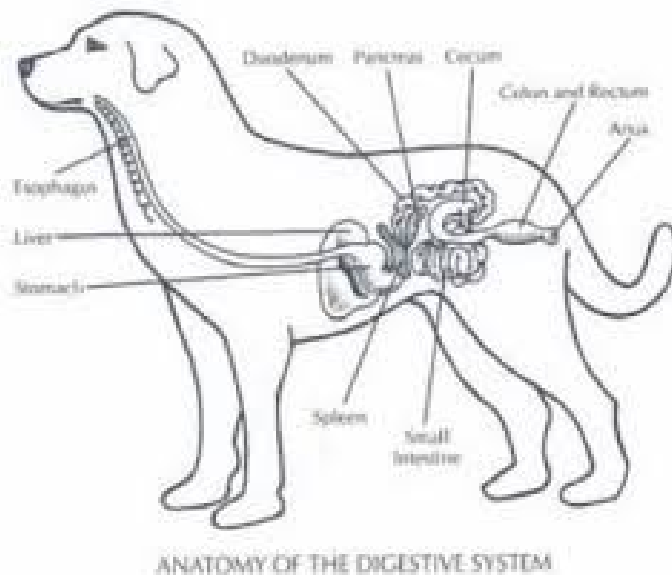
Historically, coyote fur was not only a sign of prowess but also a means of survival for native tribes across North America. The warm, dense coat of the coyote proved invaluable for protection against harsh weather conditions, and wearing or trading coyote furs was common practice. As trapping and fur trading evolved into a major industry in the 19th and 20th centuries, coyote fur became more widely available and started to feature in luxury goods such as coats, hats, and collars, as well as in the interiors of homes in the form of throws, rugs, and accessories.

Despite its traditional use and popularity, the utilization of coyote fur has come under scrutiny in recent years. Ethical concerns over animal welfare and environmental impact have led to varying opinions on the use of furs in fashion and home decor. Proponents argue that when sourced responsibly from managed populations, coyote fur can contribute to wildlife control and conservation efforts. Opponents argue for the adoption of synthetic materials that reduce animal suffering and ecological harm, promoting a shift towards more sustainable and cruelty-free practices.



Mouth

Coyotes have well-designed and versatile mouths that are critical for survival. Their oral anatomy is particularly adept at handling a wide array of tasks in their instinctual and predatory activities. The coyote mouth is well equipped with powerful jaws, designed to deliver a powerful bite. It contains 42 sharply-pointed teeth which include four prominent canine teeth iconic of the canine genus that coyotes belong to. These canine teeth, resembling long daggers, aid in gripping and tearing flesh, making hunting and dismembering prey effective.



Digestive System

The coyote's digestive system, like that of most canines, is highly specialized for the processing of protein-rich diets. This system includes the oral cavity, esophagus, stomach, small intestines, large intestines, and rectum. The process begins in the mouth, where sharp teeth and the enzyme amylase in saliva start breaking down food. The size and sharpness of the teeth indicate that coyotes are primarily adapted for eating meat.

Food leaves the mouth through the esophagus, a muscular tube that transports food to the stomach,

where strong gastric acids and enzymes break it down into a semi-liquid mixture. The stomach plays a crucial role in the digestive process of the coyote, presenting a highly acidic environment with a pH of about 1 to 2. This allows for the protein in their primarily carnivorous diet to be digested more efficiently.

The semi-digested food then passes from the stomach into the small intestine, which is responsible for the majority of nutrient absorption. Short and highly branched villi dot the walls of the small intestine, increasing its surface area to maximize nutrient absorption into the bloodstream. Digestive enzymes from the pancreas and the bile from the liver are important in the digestion of fats, carbohydrates, and proteins.

The large intestine is responsible for the absorption of water and electrolytes to conserve fluids, after which feces are stored in the rectum until they are eliminated through the anus. Although coyotes are primarily carnivorous, they do exhibit omnivorous eating habits from time to time, capable of consuming fruits, vegetables, and grains. However, these are processed less efficiently than meats due to their anatomy generally adapted for rapid digestion of proteins from their high-protein diets.



Reproduction System

Coyotes, scientific name *Canis latrans*, have an intricate mating and reproduction system that is both fascinating and integral to their ecology and survival. Their mating season generally occurs between late winter and early spring, specifically from January to March, depending on the geographic location. Coyotes are monogamous, meaning they typically form life-long pair bonds. This system not only involves the mating process but also includes mutual cooperation in raising their offspring, which brings stability to their social structure.

During the mating season, male and female coyotes undergo shifts in behavior. The male will increase

his scent marking activity, using his urine and feces to mark his territory, which signals to females that he is ready to mate. Once the mating happens, the female coyote will establish a den, often in dense vegetation, rock crevices, or burrows, where she will give birth to litter of between six to ten coyote pups approximately 60-63 days later.

After birth, both parents participate in the rearing of the puppies, a pattern known as "bi-parental care". The male will play the role of a provider, meanwhile, the mother primarily nurses and protects the cubs in the den. Their complex social families allow for a form of communal care, with adult offspring from prior years often staying behind to help raise the new litter. The young coyotes typically leave their natal group when they are about one to two years old, dispersing to form their own territories and begin their mating systems.





Growth

In terms of physical growth, coyotes typically weigh between 20 to 50 pounds, with males being slightly larger than females. Their maturation process involves reaching sexual maturity at around one year, with adults breeding once annually. Their diets are incredibly diverse, allowing them to thrive in different environments. They are known omnivores, eating small mammals, fruits, insects, and even human food waste.





Weight

The weight of a coyote can vary significantly depending on several factors including geographic location, diet, age, and sex. On average, adult coyotes typically weigh between 20 to 50 pounds (9 to 23 kilograms). However, these figures can fluctuate depending on the coyote's habitat. In the western United States, coyotes are often observed to be larger and can weigh up to 60 pounds (27 kilograms) due to colder climates and abundant food supplies. Generally, males are larger than females. In terms of diet, coyotes that have a steady supply of food might have a healthier weight, while those living in harsh conditions may weigh less due to food scarcity. Moreover, younger coyotes will naturally weigh less than adults, and their weight may be used to

gauge their health and the availability of prey in their given habitat. Understanding coyote weights is crucial for conservation and management strategies, ensuring that these adaptable creatures are thriving in their natural environments.

Historical records also show that over time, the weight of coyotes in some areas has increased, likely due to environmental changes and possibly human influence. By feeding coyotes directly or indirectly through garbage and abandoned food sources, humans might be unintentionally encouraging an increase in coyote weight and population size, leading to a variety of implications for urban areas and local ecosystems. This is an area of concern for wildlife management, particularly in urban settings.

Regular monitoring of coyote populations including trends in weight and population size provides valuable insights into both the coyote's health as a species and the health of their habitats. Larger-than-average weights or rapid population growth could indicate easy access to food and an abundance in their natural habitat, which might lead to overpopulation, whereas lower weights or population decline can signal a scarcity of resources.

Chapter 3



Abilities

Coyotes possess an array of remarkable abilities that have helped them not only survive but also flourish in a wide range of environments. Their adaptability is perhaps their most notable skill, allowing them to thrive in both suburban areas and wild landscapes, a testament to their flexibility in terms of habitat.

One of their key abilities is their intelligence. Coyotes are known for their problem-solving skills and their ability to learn quickly. They are adept at scavenging and hunting, often adapting their tactics based on the availability of prey. Their adaptability in diet is another critical ability, as they are omnivores capable of eating everything from rodents and insects to fruits and human food waste, ensuring their survival in differing environments.

Coyotes also possess excellent hearing, vision, and sense of smell. These senses allow them to detect prey and predators over long distances. They are particularly known for their acute hearing, which enables them to locate prey under snow and in dense vegetation. Their howl, which can be heard over several miles, is both a sign of communication and territorial behavior, allowing them to maintain contact with their pack and establish boundaries.

Their physical abilities are also noteworthy. Coyotes are fast runners, capable of reaching speeds up to 40 miles per hour when chasing prey. They are also great jumpers and climbers, able to scale fences and leap over obstacles, which is crucial for evading predators and capturing their prey. Additionally, their small size and light frame enable them to navigate through small spaces and conceal themselves effectively.





Bite Force

The power and efficacy of a coyote's bite force play a significant role in its survival and predatory prowess. Coyotes, native to North America, have evolved a bite force that's highly functional and crucial for taking down prey and defending territory. Their bite force quotient, a measurement ratio of a carnivore's bite force compared to its body mass, is impressively high in relation to their size.

The exact measurement of coyote bite force can be difficult to determine in the wild, but studies have provided estimations that put it between 20 and 30 psi. Comparatively, this pressure is about 4 times less than that of a dog. However, this is still substantial considering their lean, agile 20 to 50 pound body size. Coyotes have a wide, crushing jaw designed for jaws that can deliver a biting force powerful enough to kill small to

medium-sized prey like rabbits, squirrels, and even smaller dogs.

Coyotes make great use of their bite force in their hunting strategy. They are pack hunters, and their technique often involves overwhelming their prey with a barrage of bites, rendering them helpless. The powerful jaws of the coyotes can maim and eventually kill their prey with a forceful, swift bite. This instinctive and potent force is somewhat enhanced by their ability to use teamwork, increasing their success rate massively. Although coyotes are known to primarily target smaller animals, they can at times successfully take down prey much larger than themselves, thanks in part to their collective bite forces.





Jumping

In the wild, coyotes are known to be agile, cunning, and highly adaptable predators, and their jumping skills are integral to this. A coyote can leap up to 12 feet in distance, a crucial skill that aids in capturing prey and traversing various terrains. This is made possible by their powerful hind legs and flexible spine, which contributes to their explosive speed and agility.

These animals use their jump instinct when chasing prey or avoiding predators. In a challenge, the coyote will use its jumping capability to either reach the prey from an increased height or dodge incoming attacks. When cornered or in a densely

forested area, the coyote can jump from branch to branch to avoid conflict or pursue a prey.

In urban areas, coyotes often use their jumping attributes to overcome man-made barriers such as fences or walls. This has caused them to be a common sight in suburban areas, surprising to many who didn't realize wild animals could leap such heights. They are therefore a great example of evolution's adaptability and survival tactics. This ability to jump high and far not only enables them to hunt but also constantly adapt to new environments, a continuous display of their intelligence and survival skills.





Running Speed

Coyotes, scientifically known as *Canis latrans*, are renowned for their agility and impressive running abilities. These wild canines, found in various habitats across North and Central America, can reach remarkable speeds during a chase. The average coyote can run at speeds of around 30 to 35 miles per hour, but under extreme circumstances, they have been known to sprint up to approximately 43 miles per hour.

Understanding this speed is to consider the context in which it is employed. In the wild, the need for fast running generally arises when these animals are chasing down prey or evading predators. Coyotes are particularly adept at hunting small to medium-sized animals, and their speed plays a crucial role in executing successful hunts. Their ability to maintain high-speed chases over a relatively long distance sets them apart

from their domestic counterparts, such as dogs, which might have faster bursts but typically cannot sustain them as effectively over longer distances.

The biomechanics of coyote legs and their body structure also contribute significantly to their speed. With slender and strong legs, they are built for endurance and speed. Their flexible spine allows for efficient movement that maximizes energy use during high-speed runs. Additionally, their feet are designed with thick paw pads ensuring better grip on various terrains and increased shock absorption, which is critical at high speeds to prevent injury.





Swimming Speed

Although coyotes are predominantly known for their agility and speed on land, their swimming abilities are less widely recognized. However, it's important to note that coyotes are indeed capable swimmers, though their swimming speed is not their most outstanding attribute. Coyotes are quadrupedal mammals and are primarily built for running. However, when faced with bodies of water, they can swim at a reasonable pace to chase prey or cross water bodies.

Coyotes often adopt a similar swimming style to that of dogs, colloquially known as the 'dog

paddle'. This method involves synchronized paddling of their four legs, which allows them to maintain buoyancy and propel through the water. Their average swimming speed is estimated to be around 4 to 5 miles per hour. However, it's essential to bear in mind that such figures are approximate, as there is no specific scientific research on coyote swimming speeds.

These swimming abilities come in handy in a variety of scenarios. For instance, when coyotes are hunting or being hunted, swimming could be a strategic escape mechanism or a way to stealthily approach prey. Also, swimming can be an essential survival strategy for coyotes when they must cross bodies of water, such as lakes, rivers, or estuaries, to find food or migrate to new areas.

It's worth noting that coyotes, despite being average swimmers, may not always select swimming as their primary mode of transportation, especially in harsh weather or when predators are around. Instead, they will usually look for bridges, fallen trees, or other feasible ways to cross bodies of water to conserve their energy and avoid the risks associated with swimming. However, it's undeniable that coyotes' swimming abilities contribute to their adaptability and survival prowess in various habitats across North America.



Climbing

When it comes to climbing, coyotes exhibit an extraordinary capability to maneuver through rugged terrains. Their strong limbs, equipped with sharp claws and agile joints, allow them to ascend steep slopes and descend rocky cliffs with surprising ease. This ability is crucial for their survival, enabling them to access higher territories for hunting, scouting for food, or escaping predators.

Coyotes, while not renowned for their tree-climbing skills like some other canids, can occasionally be spotted in elevated positions. When faced with a vertical challenge, they rely on their innate physical attributes to scale heights. This might involve using their powerful hindquarters to push off while their front paws provide traction and grip. The agility of a coyote is truly remarkable, and watching one negotiate a

path up a steep incline is a testament to its extraordinary wilderness skills.

The spectacle of a coyote climbing is not merely a display of physical prowess, but also of mental sharpness. These animals assess their environment quickly, choosing the most stable and advantageous pathways to take. This decision-making process is essential in their daily survival, considering the harsh and unpredictable nature of their surroundings. Coyotes' ability to climb also offers them a strategic advantage, providing higher vantage points from where they can spot prey or survey their territory for potential threats.





Stealthiness

Coyotes, often called the "wily coyote" for their cunning strategies, are broadly celebrated for their stealthiness and adaptability. These canids possess a survival strategy unique in the animal world, grounded in their exceptional adaptability to various environments and their unrivaled stealth abilities. Despite being closely related to wolves, coyotes distinguish themselves with heightened invisibility, allowing them to thrive effectively across various habitats, including urban settings.

The prey they target from small mammals like rodents to larger animals such as deer fawns

attests not only to their dietary flexibility but also to a profound intelligence in determining when, where, and how to make a silent ambush. Coyotes have the innate ability to remain undetected until the opportune moment for attack. This can be attributed to their keen senses, primarily hearing and smell, which they constantly utilize to monitor their surroundings.

Moreover, the physical stature of coyotes plays a critical role in their stealth operations. They exhibit a graceful, low-profile run that minimizes movement noise and visual detection. Their adaptable tactics also extend to following prey for long duration's, exhibiting patience that few other predators can match, and then pouncing with lightning speed and precision to catch their prey off guard. Furthermore, their ability to adjust their howl frequency and volume to blend with background noise makes them masters of communication without detection.



Chapter 4



Habitat

Their incredible adaptability has allowed them to spread into a vast range of habitats, which include dense forests, deserts, grasslands, and even urban areas. This wide biodiversity presents an array of landscapes that the coyote thrives in.

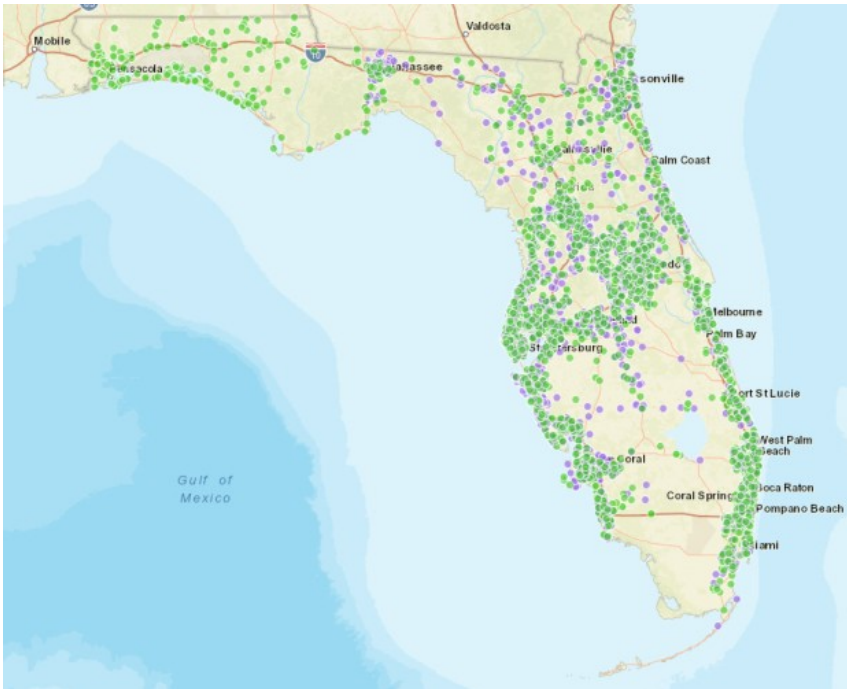
In forests, coyotes often reside near meadows or in areas where the forest opens up to an edge habitat of fields or woods. This supports their feeding tendencies as they hunt smaller animals, such as rabbits and rodents, that favor forest edges. However, in desert habitats, they will

typically live closer to water resources and take advantage of the cover that any vegetation offers.

Coyotes have an incredible ability to live in close proximity with humans. Therefore, urban and suburban environments also serve as notable habitats. They are often seen living in city parks, undeveloped lots, or along the borders of developed areas. In these settings, coyotes can adapt their diet to take advantage of any resources available, including food scraps from humans.

Finally, grasslands provide another significant habitat for coyotes. These animals thrive in wide open spaces and areas that facilitate their hunting style, which largely depends on a stealthy approach, vision, and hearing. Prairies and meadows offer these conditions, allowing them to successfully hunt prey and seek cover among tall grasses and shrubs.





Distribution

Coyotes (*Canis latrans*) display an extraordinary range of distribution across North America, a testament to their resilience and adaptability as a species. Their natural habitat traditionally encompasses grasslands, forests, and deserts, but they have increasingly moved into urban environments, demonstrating their ability to thrive in a variety of ecological settings. Historically, coyotes were mainly native to the central and western United States, but their range has significantly expanded over the last century. They are now found throughout North America, from

Alaska to Panama, and across most of the United States and Canada.

Their distribution is largely due to their incredible dietary versatility. They are omnivores able to consume both plant and animal matter, which makes them flexible when adapting to different environments. This dietary flexibility, combined with their ability to form stable, resilient social structures, gives them an advantage in rapidly changing landscapes. They are even known to shift their dietary habits based on the seasons and the availability of prey.

In urban environments, coyote distribution is often driven by the availability of food and safety from predators, which in the case of urban areas, means the presence of humans. They are frequently spotted in suburban neighborhoods, where their diet may include rodents, insects, fruits, and other small animals, but also human-provided food such as garbage or pet food. The fact that they can coexist in close proximity to humans without easily being recognized is a testament to their elusive nature and keen survival instincts.





Population status

The Coyote Population in Florida reflects an interesting phenomenon driven by a variety of factors, including changes in land use patterns, food availability, and the adaptability of the species itself. There is .2 to 1.2 coyotes per sq. mile in Florida, that's around 13,000 to 70,000 in total. Historically non-native to the state, coyotes (*Canis latrans*) have expanded their range throughout the United States, including into Florida, primarily in response to human-led changes to their environment. This expansion has notably taken place since the mid-twentieth century, drawing parallels to their west-to-east movement across North America.

One pivotal aspect of Florida's coyote population is its dense distribution in a state that is heavily influenced by human development and

urbanization. Florida's varied landscape, encompassing urban, suburban, rural, wetland, and forest eco-regions, provides the adaptable coyote a wide array of possible habitats. Coyotes have demonstrated a remarkable ability to coexist and even thrive in coastal, suburban areas where interactions with humans and pets are not uncommon, raising concerns over issues like pet safety and the spread of disease.

Moreover, the coyote's insatiable curiosity and omnivorous diet have allowed these animals to exploit the diverse food sources available in Florida. From native animals and agricultural crops to human-provided food scraps, coyotes have learned to adapt their feeding habits to capitalize on whatever is most abundant in their immediate environment. This dietary flexibility not only facilitates their population growth but also brings them into closer range with humans.





Eating Habits

Coyotes, known for their adaptability, have a highly varied diet that changes with the seasons and their habitat. In their natural environment, which spans from forests to deserts, coyotes are opportunistic feeders, displaying a flexible eating pattern.

Coyotes also display the behavior of caching. They are predominantly carnivorous but also consume plant material, reflecting their omnivorous nature. Here's a deeper look into the eating habits of these quintessential American canids.

In rural areas or wilderness regions, a coyote's diet is heavily reliant on small mammals. Rodents such as mice, rats, and squirrels form a significant part of their meals. Coyotes are also known to take down rabbits, hares, voles, and

occasionally, deer, especially fawns or diseased adults. Their hunting techniques involve stalking, chasing, and pouncing on their prey, showcasing their agility and intelligence.

Coyotes are also adept at scavenging. They often feed on carrion, such as roadkill or animals that have died from disease or old age. This behavior not only supplies them with food but also plays an ecological role in cleaning up the environment by consuming dead animals.

In urban and suburban areas, coyotes have adapted their diet to include more human-related food sources. They might eat garbage, fruits from gardens, pet food, or even pets such as cats or small dogs left unattended. This behavior often brings them into conflict with humans, especially in areas where human settlements encroach upon wilderness.

Interestingly, coyotes are not averse to plant matter and include fruits and grains in their diet. When available, they will consume fruit such as apples, berries, and agricultural crops. This dietary flexibility is one of the reasons they have successfully spread across large parts of North America, from Canada to Panama



Mating Season

Mating.....January to March
Gestation Period.....58 to 63 days

Warning: Coyote males are potentially aggressive mating season.

Coyotes typically enter their mating season during the winter months, primarily between mid-January and mid-March. This period is significant for the species as it directly influences population dynamics and behavior patterns throughout the year. The mating season is a critical phase in the life cycle of coyotes, characterized by heightened territorial behavior and increased social interactions.

During this season, coyotes display distinct behavioral changes. Their territorial calls become more frequent and louder, often heard echoing through their habitats during the night. These vocalizations serve multiple purposes: they help individuals to locate potential mates, intimidate competitors, and mark territorial boundaries. Coyote pairs, which are usually monogamous, engage in complex courtship rituals that can last several days. These rituals include playful chasing, nuzzling, and urination marking, all of which are aimed at strengthening the bond between the pair.

The timing of the coyote mating season is thought to be evolutionarily advantageous, aligning with environmental conditions conducive to rearing pups. Gestation lasts about 58 - 63 days, ensuring that pups are born during spring, when warmer weather and increased food availability improve survival rates. After birth, both parents are heavily involved in the care of the offspring, sharing responsibilities such as feeding, protecting, and teaching the pups survival skills. This cooperative parenting is crucial for the pups' development and the overall health of the coyote population.



Dens

Coyote dens typically embody the strategic abilities and clever nature of these adaptable creatures, situated in a variety of environments ranging from dense forests and grasslands to urban outskirts and desert areas. They're structures of

survival, serving as shelters for rearing their young and hiding from potential predators or harsh weather conditions.

Coyotes dig their dens underground, utilizing their sharp claws and remarkable dexterity. These dens usually feature a number of key characteristics that contribute to their functional design. Most commonly, they're found at the base of trees or under piles of rocks, providing natural support and insulation. These clever critters often prefer an elevated position for their dens, which allows them to easily scan the surrounding area for prey or threats.

Coyote dens have multiple entrances, allowing for escape routes in case of danger. These entrances can reach up to ten feet apart, providing multiple escape hatches in different directions. This strategy ensures survival by mitigating the likelihood of being cornered by a predator. Additionally, the primary burrow typically extends to a chamber about six feet below the surface, where the coyote family rests or where the female coyote gives birth.

The dens are lined with softer materials like grass, leaves, and fur, which they gather from their surroundings. Coyotes are known to change the arrangement of these materials, moving them from one den to another during their seasonal move. Outside the den, there are often scratch marks due to the coyote's habit of digging and excavating their dens.



Yelps, Yips, Barks & Howls

Coyotes, the prevalent canid species of North America, utilize a vast array of vocalizations that are both fascinating and distinctive. Among these are two crucial and resonant sounds: the yip and the howl, which are often associated with their nocturnal and pack-related behaviors. While coyotes are known to be generally quiet and unobtrusive predators, it's their voices that carry over the landscape, capturing the imaginations of humans who listen to their calls.

The coyote yip is a high-pitched, repetitive sound, often heard in the sequences when coyotes gather. It's described as a series of yaps, barks, or short yelps that create a rapid, rhythmic

ensemble. The yips function primarily as a form of social communication within the pack, facilitating coordination and cohesion. When coyotes need to regroup or maintain contact with each other, particularly after being separated, yips are an essential part of their communication toolkit.

On the other hand, the howl is a long, unbroken, melody that can echo across great distances. This sound often serves as advertisement for territory or as a mechanism to bring scattered members together. Unlike the yip, the howl is a more soothing, melodic sound, but just as powerful in its reach and effect. It's a means for coyotes to maintain social bonds, as well as to ward off other coyotes from entering their territory. Unlike yips, which are more playful and sociable, howls have an air of seriousness and territorial intent.



Chapter 5



Laws and Regulations

Coyotes, often seen as cunning and adaptable predators, are governed by various laws and regulations that aim to manage their population and interactions with humans. These rules, which can vary significantly by region, are enforced by local wildlife management agencies to maintain a balance in the ecosystem and protect human communities from potential conflicts. In many parts of the United States, for example, coyotes are typically classified as non-game or furbearing mammals, which means they are not protected under game laws, yet their management and control are regulated.

State and federal laws often provide guidelines for when and how coyotes can be hunted or trapped. Seasonal restrictions, methods of take, and requirements for licenses are common across regions where coyote hunting is allowed. For example, some states require a hunting license for coyotes year-round, while others only require it during certain times of the year. Additionally, certain methods of hunting might be restricted; for instance, using electronic calling devices or hunting over bait may be limited or prohibited in some jurisdictions.

In urban and suburban areas where coyotes are frequently spotted and sometimes become a nuisance, local ordinances may govern their management. These can include restrictions on feeding wild animals, regulations for securing garbage and compost to prevent attracting coyotes, and guidelines for proper pet care to avoid conflicts. In some cases, when coyotes become a significant threat to public safety, wildlife agencies may authorize targeted removal by trained professionals.

Education and public awareness campaigns are integral to the laws and regulations surrounding coyotes. These efforts aim to inform the public about the behaviors and habits of coyotes to reduce fear and misunderstandings. They also teach residents how to coexist with coyotes without encouraging them to lose their natural wariness of humans, which can lead to conflicts.



Protection

One of the main conservation strategies for coyotes focuses on promoting coexistence between humans and these animals. Education plays a crucial role in this process. By learning about coyote behaviors, habitats, and needs, communities can take steps to minimize conflicts, such as securing garbage, feeding pets indoors, and using deterrents to discourage coyotes from entering heavily populated areas. Such actions not only protect coyotes from harmful encounters but also help maintain the ecological balance in which they play a key role as predators.

Legal protection is another vital aspect of coyote conservation. Although coyotes aren't listed as endangered or threatened on a federal level, many states and municipalities have implemented their laws and regulations to manage coyote populations humanely. These laws often aim to regulate hunting and trapping seasons, methods, and permits, ensuring that these activities are conducted ethically and without undue suffering to the animals.



Hunting

Coyote hunting is an activity practiced by many people in the United States, particularly in the Western and Midwest regions. This form of hunting is primarily done for a variety of reasons, including population control, the protection of livestock and pets, and occasionally for the sport and the challenge it presents. Coyotes, being highly adaptable and incredibly clever creatures, have seen their numbers increase significantly over the past few decades, leading to an escalation of human-coyote conflicts. This increase in population is largely due to the expansion of human developments into traditional coyote habitats, which has provided them with a steady, reliable food source.

The primary method for hunting coyotes involves the use of calls, which are designed to mimic the vocalizations of prey in distress or the vocalizations of coyotes. There are both electronic and mouth-blown calls available, each with their own nuances and effectiveness. Successful coyote hunters must understand the behaviors of their quarry, as well as be able to read the landscape and take advantage of the wind and terrain to conceal their presence. This aspect of coyote hunting requires patience and finesse, as well as a keen understanding of animal behavior and environmental influences.

In addition to calls, another integral part of the coyote hunting process is the effective use of decoys and concealment. Coyotes are wary by nature, and even the most subtle movement or exposure can send them running. Therefore, hunters often use decoys to distract and draw the coyotes closer, while relying on well-disguised, immobile blinds or cover to remain hidden. Despite their cunning, with the right setup, coyotes can be enticed within range and thus provide the ultimate hunting challenge.

Camouflage and scent control are also critical aspects of coyote hunting. Modern technology has improved camouflage and scent control products, providing hunters with better tools to conceal themselves and remain undetected. Coyotes rely heavily on their sense of smell and sight, thus careful consideration and use of the appropriate gear can make a significant difference in the success of a hunt.



Illegal Feeding

Coyote illegal feeding, often referred to as supplemental feeding, is a contentious issue that has drawn significant attention from environmentalists, animal activists, and residents in urban areas where coyotes frequently visit. This practice occurs when humans provide food to coyotes, either intentionally or unintentionally. The rationale behind it might vary from person to person; some aim to address potential scarcity in the coyotes' natural food sources, others do it out of compassion for the animals, or simply because they enjoy watching them. However, despite these good intentions, illegal feeding poses a series of risks and raises several concerns.

The primary concern arises from the behavioral changes it can induce in coyotes. Feeding coyotes can gradually habituate them to human presence, reducing their natural fear and potentially leading to aggressive behavior. Coyotes that have been regularly fed by humans might consider residential areas as a reliable food source, leading to more frequent sightings and encounters that can put both humans and pets at risk. Such conflicts may inevitably lead to a negative outcome for the animals.

This dependency on human-provided food could weaken their survival skills in the wild, as they might find it harder to catch prey or gather food using their natural methods. This kind of human interference may also disrupt the coyote's natural diet, which could have serious health consequences for the coyote and the local ecosystem it is part of.



Chapter 6



Lifespan

The lifespan of Coyotes is quite intriguing, demonstrating their resilience and adaptability to various environments. In the wild, Coyotes generally live about 6 to 8 years, although accounts show that some may live up to 13 years with optimal conditions. This includes adequate food supply, minimal human interference, and a safe environment with minimal threats from other predators. Their longevity could be even further extended for those in captivity, as they can receive better health care, continuous food supply, and safety from natural threats. In some cases, Coyotes in captivity have been recorded to live for up to 17 to 20 years, significantly exceeding their life expectancy in the wild.

Coyotes lifespans can be deeply influenced by their living conditions, whether they lead a complicated life filled with the struggle for survival in the wild or are provided a peaceful and protected life in captivity. However, living in the wild, they have the freedom to run free over the vast landscapes, hunting, breeding, and expressing their true wild behavior. On the other hand, confined in captivity, Coyotes often lead a less stressful life, but deprived of their natural behaviors and instincts. This powerful contrast truly emphasizes how complex the notion of "quality of life" can be in terms of animal welfare. Despite this disparity, Coyotes have proved themselves surprisingly adaptable to a multitude of environments, underlining their survivalist nature.





Eating Habits

They have a diet that varies widely according to their habitat, season, and availability of food sources. As omnivores, their eating habits are quite flexible. In urban and suburban settings, coyotes may consume pet food, fruits, and garbage, whereas in wild landscapes, their diet consists mostly of small mammals, such as rodents, rabbits, and squirrels. Coyotes also eat larger prey like deer when the circumstances or necessity demands, demonstrating their ability to hunt both small and large animals. Additionally, they will feast on insects, birds, and a variety of plant material including fruits like melons, berries, and cultivated crops.

Seasonal changes greatly influence a coyote's eating habits. During warmer months, they can rely on an abundant supply of insects and vegetation, whereas, in winter, prey like rodents become their dietary mainstays. Coyotes are opportunistic feeders and will take advantage of food that is easiest to obtain, which can lead to them scavenging on carrion when live prey is scarce. This flexibility in their diet is a key factor in their successful survival and proliferation despite human encroachment on their habitats. The adaptation to different food sources has allowed coyotes to thrive in a wide range of environments, from dense forests and deserts to suburban neighborhoods.





Development

One of the most striking aspects of the coyote's growing development is their ability to flourish in the face of hunting and habitat loss. Traditionally, coyote populations have been controlled through culling and hunting, yet their numbers continue to rise. This phenomenon, often referred to as the 'Coyote effect', demonstrates that when coyote populations are reduced, the remaining individuals have more resources available, leading to larger litter sizes and higher survival rates.

The development of coyotes has also sparked interest in wildlife management and conservation. Many wildlife organizations and community groups recognize that living alongside coyotes requires understanding and respecting their natural behaviors. Educational programs on coexistence have expanded, teaching people how to properly store garbage, feed pets indoors, and modify landscapes to reduce coyote encounters.



Social Structure

Coyotes have a sophisticated and adaptive social structure that varies depending on factors like geographic location and the availability of resources. Their social organization can range from solitary individuals to pairs, family units, or even larger, relatively permanent groups.

In urban environments, where food is more abundant and easy to obtain, coyotes are often found in family units. These groups are centered around breeding pairs who remain together throughout the year. The pair's pups from previous years often stay with their parents, forming an extended family. This nucleus is occasionally augmented by unrelated coyotes who join the group for a period of time, whether for protection, social interaction, or to help raise the young. These helpers contribute to the group by babysitting the pups or assisting in finding food.

In rural areas and wilder environments, coyote social structure tends to be more fragmented due to the larger territories required to sustain individual animals. Fewer resources can lead to a higher prevalence of solitary living or smaller, more temporary social groups. However, coyotes in these regions still maintain strong familial ties, with siblings or mating pairs spending a great deal of time together.

Communication within coyote groups is complex and multifaceted, using a variety of sounds, body postures, and scents. Howls, yips, barks, and whines serve different functions such as territorial proclamation, social bonding, and warning signals. Body language is also key, with postures that indicate aggression, submission, or play. Scent marking is another important component of their communication, used for marking territory and conveying individual identity, social status, and reproductive status.





Behavior

They are highly adaptable creatures and exhibit complex behaviors that have enabled them to thrive in a wide range of environments across North America. These behaviors are a combination of natural instincts, intelligence, and their ability to learn from their surroundings.

One of the most notable behaviors of coyotes is their pack dynamics. While they can live and hunt alone, coyotes are also known for living in family groups composed of a breeding pair and their offspring. Within this family structure, there is often a dominance hierarchy, where the breeding pair holds the highest position and their roles are typically gender divided; the male is often responsible for defending the territory and

foraging for food, whereas the female takes the lead on rearing the young.

In terms of hunting behavior, coyotes are opportunistic, consuming a diverse diet ranging from small mammals like rodents and rabbits to fruits and vegetables. They exhibit strategic hunting techniques, sometimes working in teams to corner prey or 'ambush' small animals. Additionally, they are known for their ability to adapt to urban environments, where their diet may also include human-provided food in the form of garbage or pet food.

Another interesting behavior of coyotes is their communication. These creatures have an elaborate vocalization system including howls, yips, and barks, which are used for various purposes. One of the most fascinating is the 'howl', used to establish territory, locate other pack members, and possibly even to strengthen social bonds among pack members. Furthermore, non-vocal cues like body postures, facial expressions, and tail signals are also significant elements of coyote communication.



Chapter 7



Conservation

Coyote conservation is more about coexistence than preservation in the traditional sense. Unlike many endangered species, coyotes are relatively abundant, highly adaptable, and their populations continue to expand. Much of the conservation efforts for coyotes focus on managing human-coyote interactions and educating the public on their roles in urban and rural environments. This includes teaching human communities about coyote behavior and what measures can be taken to minimize conflicts, such as secure garbage handling and responsible pet care. Urban planning is also part of conservation efforts, aiming to keep green spaces and wildlife corridors intact, allowing coyotes a space to thrive while limiting their interactions with humans.

Scientists and conservationists are also working to study coyotes in their natural and urban environments to better understand their ecological roles. Coyotes play a significant role in the food chain, affecting the populations of other species through predation and indirectly through their prey's behavior. Their impact on disease dynamics, for example, is an area of ongoing research. Understanding these dynamics helps conservationists and environmental managers to make informed decisions that benefit both wildlife and human populations.

Efforts to conserve coyotes often include public advocacy for non-lethal coyote management. Many traditional methods for controlling perceived problematic coyotes, such as trapping and shooting, are replaced with humane and environmentally sound measures. These can involve habitat modification, human behavior modification, or non-lethal aversive conditioning strategies that teach coyotes to avoid humans.





Threats

Coyotes, while providing important ecological functions as predators in several ecosystems, can become threats under certain circumstances, most notably when they come into conflict with human societies. This conflict can manifest in two distinct areas: the threat to livestock in agricultural environments and the endangerment of pets and humans in suburban and urban settings. In rural areas, coyotes are often seen as threats to farmers and ranchers, as they prey upon sheep, goats, calves, and poultry. This creates significant economic loss and forces farmers to take costly preventative measures to protect their herds.

In suburban and more urban settings, the expansion of human territories has encroached upon coyote habitats. As a result, coyotes have become habitual visitors, scavenging for food left out

for pets or improperly stored garbage. When coyotes become accustomed to human presence, they may lose their natural fear and caution, leading to emboldened aggression towards both pets and humans. Particularly alarming are cases where coyotes have attacked and injured people, including young children playing in parks or backyards.

Efforts to mitigate coyote threats employ a variety of strategies. These include non-lethal tactics such as education on proper waste disposal, installation of coyote-proof fencing, use of wolf urine to deter coyotes, and wildlife managers employing aversive conditioning techniques. More drastic measures, such as hunting and trapping, are controversial and are rarely effective in the long term, as coyotes have a high reproduction rate and can quickly repopulate an area where they've been removed. Conservation groups and wildlife experts advocate for coexistence strategies that aim to keep coyotes wild and wary, while ensuring public safety and preserving these animals' critical ecological roles.

Understanding the root causes of coyote threats, such as habitat destruction and the easy availability of human food sources, is crucial for devising effective and humane management strategies. As humans and coyotes continue to cohabit shared landscapes, finding the right balance becomes critically important. It's a matter not just of safety for humans and domestic animals, but also of maintaining the balance in ecosystems that coyotes help to regulate.



Human

The main threat that coyotes pose to humans is primarily to pets, particularly smaller animals like cats and small dogs that can be seen as easy prey. Coyotes have been known to attack and prey on these animals, which can lead to traumatic experiences for pet owners and, in severe cases, provoke fear among community members regarding the safety of their own pets. Additionally, aggressive coyotes, which are rare, can also pose direct threats to humans, especially when they lose their natural fear of humans due to being fed by people or habituated to urban environments. Such interactions can result in injuries, particularly to children and elderly individuals, who may be more vulnerable.

Conversely, humans pose several threats to coyotes. The expansion of human settlements into coyote habitats often leads to habitat loss and fragmentation, which impacts their natural behaviors and survival. Coyotes can also be hit by vehicles on busy streets, a common cause of death in urban settings. Moreover, human activities can lead to the spread of diseases such as canine distemper and rabies, which can be transmitted to coyotes from domestic dogs. Lastly, direct threats include hunting and trapping, as well as lethal control measures taken by some communities in response to perceived threats to human safety or livestock, despite research suggesting such measures may not effectively manage populations and may inadvertently exacerbate conflicts.





Python's

On the other hand, the python, particularly invasive species like the Burmese python in the Florida Everglades, presents a more direct and significant threat to native wildlife. Pythons are apex predators with an insatiable appetite, capable of consuming a wide variety of animals from small to medium-sized mammals and birds, to large prey like deer and alligators. This predatory capability not only disrupts existing predator-prey relationships but also reduces biodiversity by eliminating species that are vital to the functioning of their ecosystems. Pythons, being non-native in their invasive regions, often have no natural predators themselves, allowing them to exacerbate their impact unchecked.

The interaction between coyotes and pythons is a relatively new subject in the ecology of predator-prey relationships. These two species do not natively share the same ecosystem, but global warming, human activities, and climate change might increase their interactions in the future. A potential overlap in their habitats could lead to complex territorial disputes and altered animal behaviors. Additionally, such scenarios might force smaller prey species to alter their survival strategies further, adding another layer of threat to the already disrupted ecosystems.





Disease

One of the major diseases carried by coyotes is rabies, a potentially fatal viral infection that affects the central nervous system. This disease can be transmitted through saliva, usually via a bite. Rabid coyotes may exhibit changes in behavior, becoming more aggressive or, conversely, uncharacteristically tame, which can increase the risk of human and domestic pet interactions. Given the dense populations in urban and suburban areas, the potential for rabies to spread through pet populations and eventually to humans is a significant public health concern.

Another disease vector attributed to coyotes includes ehrlichiosis, a tick-borne illness.

Coyotes, serving as hosts for ticks, can harbor species that infect humans and domestic pets, leading to a variety of symptoms ranging from fever and headache to more severe conditions if left untreated. The expansion of coyote populations into urban environments can, therefore, increase the incidence of tick-borne diseases among city dwellers and their pets.

Moreover, coyotes are known to carry parvovirus and canine distemper, both of which can affect unvaccinated pets if direct or close contact occurs. Parvovirus, in particular, is highly contagious and can be lethal to puppies, emphasizing the importance of vaccination and responsible pet ownership in areas where coyotes are present.

In addressing diseases carried by coyotes, both animal and human health authorities play a vital role in monitoring, educating the public about precautions, and implementing measures to reduce the interactions and spread of such diseases. Public education is pivotal in teaching individuals how to secure their trash, avoid feeding wildlife, and properly vaccinate pets to minimize disease transmission risks.



Chapter 8



Living with Coyotes

Urban and suburban development has increasingly intersected with the habitats of wild animals, notably coyotes. Predominantly found in North America, these adaptable creatures have learned to coexist with human populations, moving into neighborhoods and even city centers. This can lead to challenges for both humans and the animals, requiring understanding, caution, and respect for each other's presence.

Understanding Coyote Behavior

Coyotes are primarily nocturnal but can also be seen during the daytime. They are omnivores and scavengers, consuming small rodents, insects, fruits, and even pet food left outside. Coyotes typically avoid humans and are timid by nature, but feeding them or allowing them to become accustomed to human presence can lead to more frequent and less intimidated contact.

Safety Measures

To prevent negative encounters, it's essential to take safety measures. Keep small pets under supervision outdoors, especially during dusk and dawn which are Coyotes' most active times. Do not leave pet food or water outside, and ensure garbage is securely stored. If you see a coyote, make loud noises or use deterrents like water sprays to encourage it to leave, while also keeping a safe distance.

Coyote Education

Educational initiatives in communities can help to manage coyote-related issues. Local wildlife organizations, schools, and community centers can hold workshops to educate residents about coyote behavior, safety measures, and ways to minimize interactions. By understanding coyotes, we can reduce fear and conflict.

Adopting a proactive and informed approach to living with coyotes can ensure their preservation and our safety, preserving the delicate balance of urban ecosystems while enjoying our natural surroundings. Through understanding and respect, we can share our neighborhoods with these adaptable creatures, fostering a peaceful and sustainable environment for all.

Protecting natural habitats and managing human-wildlife interactions is a responsibility that lies with everyone. By combining knowledge and kindness, we can ensure that our coexistence with coyotes is as peaceful and beneficial as possible.

Attacks in the United States



Coyote attacks in Florida, although rare, are increasingly drawing attention in recent years, especially in urban areas where human-wildlife interactions are more frequent. These conflicts largely stem from the expansion of human settlements into coyote habitats. While coyotes mostly prefer to avoid human contact, the availability of food, water, and shelter associated with residential areas often lure them closer. In Florida, this is exacerbated by the state's diverse and vast ecosystems, which provide ample shelter for coyotes to thrive.

Florida's landscape varies widely, from everglades and wetlands to suburban neighborhoods. Coyotes thrive in these varied habitats, adapting to urban

environs where food sources are plentiful. From fruit falling from trees to traditional pet food left outdoors, these food sources can unintentionally encourage coyote presence and lead to habituation. Once coyotes become habituated to humans, the line between wary animals and potential threats can blur, potentially leading to attacks under certain circumstances.

Some of the most noteworthy coyote attacks in Florida have involved pets. Coyotes, being natural predators, are known to target small animals. Unattended pets, particularly those left in securely fenced areas at night, can become targets. There are also rare reports of coyotes attacking humans, typically small children or adults who are perceived as weak or vulnerable. These incidents are concerning and contribute to the growing debate on managing wildlife in human-dominated landscapes.

Florida wildlife management authorities are taking proactive steps to address the issue. Strategies include public education initiatives to raise awareness about living safely with coyotes, advising residents to keep food indoors, secure garbage, and maintain pets on leashes. In more severe cases, when coyotes are a clear public danger, authorities may implement coyote control programs involving trapping and relocating, or even lethal removal, although these are controversial and always a last resort.

Chapter 9



Safety While Hiking and Swamp Hiking

Coyote Safety When Hiking: Tips and Precautions

Understanding Coyotes and Their Behavior Coyotes are wild animals that are naturally fearful of humans but can become habituated to human presence, especially in areas where they are frequently fed or where they find food easily. This change in behavior may lead them to lose their natural fear, making encounters potentially dangerous. Knowing how to behave and what to expect when hiking in areas frequented by coyotes is crucial for your own safety and the well-being of these wild animals.

Precautions Before Your Hike Before heading out on a hike in known coyote territory, take the time to learn about coyote behavior and safety protocols. Wear sturdy, closed-toe shoes and try to hike in groups rather than alone. Make sure your pet, if you are bringing one, is on a leash at all times to prevent it from attracting coyote attention. Keep a safe distance from any coyotes you might see and do not approach them, even if they seem approachable or seem to welcome attention.

What to Do During an Encounter If you encounter a coyote while hiking, the first thing to remember is not to run. Running can trigger a coyote's natural chase instinct. Instead, stand tall, wave your arms, and make loud noises to appear larger and more intimidating. The goal is to discourage the coyote, making them feel you are a threat rather than an easy prey or a harmless figure. Always avoid direct eye contact, as this can be perceived as a challenge, and slowly back away, keeping the animal in your field of vision until it is out of sight.

Protecting Wildlife by Not Feeding Coyotes It's crucial to not feed coyotes or other wildlife, even unintentionally. Leaving food out or tossing scraps can rapidly habituate coyotes, leading them to associate humans with a food source. This can lead to more frequent and possibly aggressive encounters. Ensure to properly store your food and dispose of trash in secure containers, especially if camping or spending extended periods in coyote territory.

Hiking Smart: Additional Tips for Coyote

Safety Carry a hiking stick or pepper spray specifically designed for animals (dog spray, bear spray, or other animal deterrent sprays) on your hike. These can be effective tools to deter coyotes from approaching you too closely. Inform someone of your planned route and expected return time, especially during solo hikes. If hiking with children, keep them close to you and teach them about wildlife safety, so they understand the importance of not approaching wild animals, no matter how friendly they might seem.





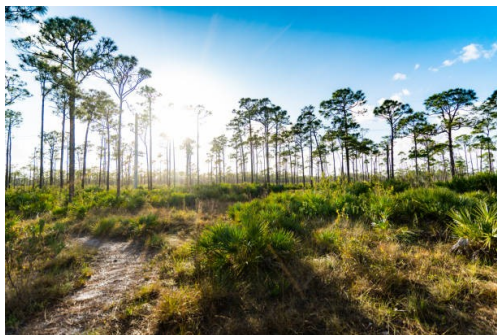
Florida Trail at Big Cypress

In recent years, Coyotes have made their presence known in the sprawling environment of Big Cypress, a region renowned for its diverse and vibrant wildlife. This large, wild untrained remnant of South Florida has always been home to an impressive range of species, but the emergence of these adaptable predators provides an intriguing addition to its animal repertoire. The Coyote appearance in this domain serves as a testament to their extraordinary ability to thrive in differing environments, from desolate wildernesses to densely populated urban areas and everything in-between.

They are experts at finding food, which involves a versatile diet including creatures like rabbits,

rodents, birds, reptiles, and even plant materials. In Big Cypress, they seem to have specialized in a successful cohabitation with the region's sitous animal groups, sharing the landscape yet managing to stake their own predatory territory. Coyotes trot through the tall grasses of Big Cypress, blending into the environment with their tawny fur. As dusk falls, their eerie howls entwine with the rustling of the wind in the cypresses, marking a sound that has become more familiar to this region.

The presence of Coyotes in Big Cypress has indeed raised eyebrows within the zoological community. It raises questions about their migration from traditional habitats to new territories. On the one hand, their remarkable adaptability is a clear affirmation of their resilience, yet on the other, it brings concerns about the potential effect their presence might have on the established local ecosystem. Wild animals in this area, long accustomed to being apex predators, may find themselves caught in a shift in their food chains and webs due to the arrival of these new newcomers.





Recap of some of the Safety Protocols

Scan the areas often for signs of coyotes presents

Never take pets around coyote's

Familiarize yourself with the animals behaviors

Be Cautious during mating seasons

Never provoke a coyote

Never approach a coyote

Never Feed a coyote

Never try to touch or handle a coyote

Do not leave small children or pets outside
unattended.

Be aware that coyotes are more active in the
spring when feeding and protecting their young

If followed by a coyote, make loud noises.

Back away slowly

Keep a safe distances

Carry pepper spray



Getting Attacked

Make Direct Eye Contact and Do Not Run: This might sound counter-intuitive, as your first instinct may be to turn and flee. However, running can activate the coyote's chase instinct, potentially leading it to pursue you. Instead, stand tall, make yourself look as large as possible, and back away slowly without turning your back on the animal.

1.Make Noise: Loud noises can often scare coyotes away. Yell, clap your hands, or bang objects together to create a loud noise. This can signal to the coyote that you pose a threat and are not an easy target.

2.Use Defensive Tools: If you have a walking stick, backpack, or any object that can be used defensively, hold it up and make it clear to the coyote that you are not an easy or undefended target. Bear spray can also be effective against coyotes, but is less commonly carried for this purpose.

3.Protect Vulnerable Areas: If the coyote continues to advance, protect your head and neck. These are critical areas for survival and can easily be injured in an attack. Use your arms, backpack, or any available shield to guard these areas.

4.Seek Shelter or a Safe Space: If possible, slowly make your way to a car, building, or any location that you perceive as safer without turning your back on the coyote. Ensure that doors of buildings or cars are unlocked if you plan to run to them for immediate safety.

5.Kick & Fight: Kick them if you can, hit them with what ever you have and never let them get you on the ground.

Your priority is to get to a safer place without running or turning your back to them.

Chapter 10

Directory

Big Cypress Oasis Visitor Center: 239-695-2000

Everglades National Park: 305-242-7700

Florida Fish and Wildlife Conservation Commission
Wildlife Alert Hot-line: 888-404-3922

Florida Fish and Wildlife Conservation Commission
866-392-4286

Florida State Parks: 800-326-3521

United States Forest Service (USFS) : 800-832-1355

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