

# PINECREST GOLF COURSE

Wildlife Species  
on the Course

There are over a dozen different animals present on the roughly 50 acres of land here at Pinecrest Golf Course.

A picture and brief description of those most often seen follows.

# RACCOON



Raccoons are a familiar sight just about everywhere, because they will eat just about anything. They are found in forests, marshes, prairies, and even in cities. They are adaptable and use their dexterous front paws and long fingers to find and feast on a wide variety of fare.

In the natural world, raccoons snare a lot of their meals in the water. These nocturnal foragers use lightning-quick paws to grab crayfish, frogs, and other aquatic creatures. On land, they pluck mice and insects from their hiding places and raid nests for tasty eggs.

Raccoons also eat fruit and plants—including those grown in human gardens and farms. They will even open garbage cans to dine on the contents.

These ring-tailed animals are equally opportunistic when it comes to choosing a denning site. They may inhabit a tree hole, fallen log, or a house's attic. Females have one to seven cubs in early summer. The young raccoons often spend the first two months or so of their lives high in a tree hole. Later, mother and children move to the ground when the cubs begin to explore on their own.

Raccoons in the northern parts of their range gorge themselves in spring and summer to store up body fat. They then spend much of the winter asleep in a den.

Chipmunks are small members of the squirrel family. Their pudgy cheeks, large, glossy eyes, stripes, and bushy tails have made them a favorite among animators, and landed them a series of starring roles in Hollywood.

Of the 25 species of chipmunks, all but one, Asia's *Tamias sibiricus*, is found in North America. They are generally seen scampering through the undergrowth of a variety of environments from alpine forests to shrubby deserts. Some dig burrows to live in, complete with tunnels and chambers; others make their homes in nests, bushes, or logs.

Chipmunks can be gray to reddish-brown in color with contrasting dark and light stripes on the sides of their face and across their back and tail. They range in size from the least chipmunk, which, at 7.2 to 8.5 inches and 1.1 to 1.8 ounces, is the smallest chipmunk, to the Eastern chipmunk, which grows up to 11 inches and weighs as much as 4.4 ounces.

Chipmunks generally gather food on the ground in areas with underbrush, rocks, and logs, where they can hide from predators like hawks, foxes, coyotes, weasels, and snakes. They feed on insects, nuts, berries, seeds, fruit, and grain which they stuff into their generous cheek pouches and carry to their burrow or nest to store. Chipmunks hibernate, but instead of storing fat, they periodically dip into their cache of nuts and seeds throughout the winter.

Their shrill, repeated, birdlike chirp is usually made upon sensing a threat but is also thought to be used as a mating call by females. Chipmunks are solitary creatures and normally ignore one another except during the spring, when mating takes place. After a 30-day gestation, a litter of two to eight is born. The young stay with their parents for two months before they begin to gather their own provisions for the winter ahead.

For the most part, chipmunks, although susceptible to forest fragmentation, are not currently threatened. However, the Palmer's chipmunk (*Tamias palmeri*) is considered a vulnerable species.



# CHIPMUNK



## **COTTONTAIL RABBIT**

There are several species of cottontail rabbit, but the eastern cottontail is the most common. This ubiquitous animal can be found from Canada to South America and, in the United States, from the East Coast to the Great Plains. Cottontails range from reddish brown to gray, but all feature the distinctive "cotton ball" tail for which they are named.

These rabbits seek out habitat on the fringes of open spaces, such as fields, meadows, and farms, but can adapt to other habitats—including those of humans.

They browse at night on grasses and herbs and are fond of garden fare such as peas and, of course, lettuce. In winter, their diet becomes a bit coarse and consists of bark, twigs, and buds. During the day, cottontails often remain hidden in vegetation. If spotted, they flee from prey with a zigzag pattern, sometimes reaching speeds of up to 18 miles (29 kilometers) an hour.

Females give birth in shallow ground nests, to young so helpless that perhaps only 15 percent survive their first year. Fortunately, rabbits breed three or four times every year and produce three to eight young each time. Young rabbits mature quickly and are self-sufficient after only four or five weeks. They are sexually mature after only two or three months, so populations are able to grow with staggering speed.

Cottontails are plentiful and can be problematic for farmers; they are also a popular game animal.

Squirrels, with more than 200 species live all over the world, with the notable exception of Australia.

The tiniest squirrel is the aptly named African pygmy squirrel—only five inches long from nose to tail. Others reach sizes shocking to those who are only familiar with common tree squirrels. The Indian giant squirrel is three feet long.

Like other rodents, squirrels have four front teeth that never stop growing so they don't wear down from the constant gnawing. Tree squirrels are the types most commonly recognized, often seen gracefully scampering and leaping from branch to branch. Other species are ground squirrels that live in burrow or tunnel systems, where some hibernate during the winter season.

Ground squirrels eat nuts, leaves, roots, seeds, and other plants. They also catch and eat small animals, such as insects and caterpillars. These small mammals must always be wary of predators as they have few natural defenses. Sometimes groups of ground squirrels work together to warn each other of approaching danger with a whistling call.

Tree squirrels are commonly seen everywhere from woodlands to city parks. Though they are terrific climbers, these squirrels do come to the ground in search of fare such as nuts, acorns, berries, and flowers. They also eat bark, eggs, or baby birds. Tree sap is a delicacy to some species.

Whether they dwell high in a tree or in an underground burrow, female squirrels typically give birth to two to eight offspring. Babies are blind and totally dependent on their mothers for two or three months. Mothers may have several litters in a year, so most squirrel populations are robust.



## **GRAY SQUIRREL**

The common muskrats are found in marshes, quiet streams, and ponds through most of North America, but are absent from the extreme west and southeastern United States. A common muskrat resembles a large house rat with its tail flattened on either side; its hind feet are partially webbed between the toes. Its outer fur is shiny brown, and it has a dense undercoat. Muskrats are 10 to 14 inches, not including its 8 to 10 inch tail and weigh 2 to 3 pounds. A solitary dweller, it may live in a burrow in a steep bank or a reed hut built in marshy shallows. Muskrat burrows are constructed above water level and are connected to an underwater entrance by a tunnel; huts are built with an underwater opening. Muskrats do not build dams or fell trees as do beavers. They swim by paddling with the hind feet, using the tail as a rudder. They feed on vegetation and aquatic animals; their chief enemy is the mink. Mating occurs in spring and summer. The gestation period is about 30 days and the female bears several litters of two to six young each season. Muskrat fur is much used commercially, chiefly for women's coats. It is often dyed to resemble more expensive furs and is sold under a variety of names, including *Hudson seal* and *river mink*. The secretion of the musk gland is used in making perfume.

Muskrats are classified in the phylum Chordata, subphylum Vertebrata, class Mammalia, order Rodentia, family Cricetidae.



## MUSKRAT



## MOUSE

The mouse is a small rodent that is spread widely throughout nearly every country. The mouse is found in all corners of the globe, including parts of Antarctica. Many people today like to keep the mouse as pets because of the small size and quiet temperament of the mouse. The mouse is also used a lot in scientific research though the mouse is not an easy animal to examine. The mouse is often easy prey around the world for small mammals, birds and reptiles. Due to this the mouse generally does not live for much longer than a few months in the wild, mainly because the mouse is small easy prey for many mammals and birds.. The mouse though has been known to get up to a few years old when kept as a pet.

Mice can be harmful pests at times, through damaging and eating crops and spreading diseases through their parasites and feces. It is because of the pest problems caused by mice, that domestic cats are thought to have been introduced into common households.

The gestation period in female mice is less than a month, and the female mouse has an average litter size of about six baby mice, although the mouse litter size is commonly higher than six. The baby mice are known as pups and these mice pups are born with no hair and with their eyes and ears closed. Mouse babies are weaned when they are around three weeks old.

There are nearly 40 different known species of mouse found throughout the world. The different mouse species range in size and color that is generally dependent on their environment.

Shrew is the common name for the small, insectivorous mammals of the family Soricidae, related to the moles. Shrews have mouse like bodies and long, pointed snouts with tiny, sharp teeth. They are terrestrial and nocturnal, mostly living under vegetation; some occupy the burrows of other small animals. Their musky odor, produced by a pair of glands on their flanks, deters some of their potential predators. Extremely active and nervous, they have a higher metabolic rate than any other animal. The heart of the masked shrew beats 800 times a minute, considerably faster than that of the hummingbird. Shrews must eat constantly in order to stay alive; most will starve to death if deprived of food for half a day. They eat anything available, but prefer small animals; they are economically important as destroyers of insects and slugs that harm crops. Shrews are easily startled and will jump, faint, or drop dead at a sudden noise. They are vicious fighters, killing and eating larger animals, such as mice, as well as other shrews. Shrews live about 15 months and reproduce rapidly, bearing up to four litters a year, with up to eight young in a litter. They are found in Europe, Asia, North, South and Central America. True shrews are classified in the phylum Chordata, subphylum Vertebrata, class Mammalia, order Insectivora, family Soricidae.

## SHREW



There are more than 60 different species of opossum, which are often called possums. The most notable is the Virginia opossum or common opossum—the only marsupial (pouched mammal) found in the United States and Canada.

A female opossum gives birth to helpless young as tiny as honeybees. Babies immediately crawl into the mother's pouch, where they continue to develop. As they get larger, they will go in and out of the pouch and sometimes ride on the mother's back as she hunts for food. Opossums may give birth to as many as 20 babies in a litter, but fewer than half of them survive. Some never even make it as far as the pouch. Opossums are scavengers, and they often raid garbage cans, dumpsters, and other containers. They are attracted to carrion and can often be spotted near road kill. Opossums also eat grass, nuts, and fruit and they hunt mice, birds, insects, worms, snakes, and even chickens.

When threatened by dogs, foxes, or bobcats, opossums sometimes flop onto their sides and lie on the ground with their eyes closed or staring fixedly into space. They extend their tongues and generally appear to be dead. This act may put a predator off its guard and allow the opossum an opportunity to escape. This is where we get the expression 'playing possum.'

Opossums are excellent tree climbers and spend much of their time aloft. They use their sharp claws, which dig into bark, and by a long tail that can be used as an extra limb. Opossums nest in tree holes or in dens made by other animals.

These animals are widespread and are sometimes hunted as food, particularly in the southern United States.

## OPOSSUM



## FOX

Foxes live around the world in many diverse habitats including forests, grasslands, mountains, and deserts. They also adapt well to human environments such as farms, suburban areas, and even large communities. The fox's resourcefulness has earned it a legendary reputation for intelligence and cunning.

Foxes are solitary hunters who feed on rodents, rabbits, birds, and other small game—but their diet can be as flexible as their home habitat. They will eat fruit and vegetables, fish, frogs, and even worms. They will also dine on garbage and pet food if available.

Like a cat's, the fox's thick tail aids its balance, but it has other uses as well. A fox uses its tail (or "brush") as a warm cover in cold weather and as a signal flag to communicate with other foxes. Foxes also signal each other by making scent posts—urinating on trees or rocks to announce their presence.

In winter, foxes meet to mate. The vixen (female) typically gives birth to a litter of 2 to 12 pups. Both parents care for their young through the summer before they are able to strike out on their own in the fall.

Foxes are hunted for sport, though not extensively, and are sometimes killed as destructive pests or frequent carriers of rabies.





## **WHITE- TAILED DEER**

White-tailed deer, the smallest members of the North American deer family, are found from southern Canada to South America. In summer they typically inhabit fields and meadows using clumps of broad-leaved and coniferous forests for shade. During the colder months they generally keep to forests, preferring coniferous stands that provide shelter from the harsh elements.

Adult white-tails have reddish-brown coats in summer which fade to a duller grayish-brown in winter. Male deer, called bucks, are easily recognizable in the summer and fall by their prominent set of antlers, which are grown annually and fall off in the winter. Only the bucks grow antlers which they use in sparring matches during the mating season, also called the rut, to fight over territory.

Female deer, called does, give birth to one to three young at a time, usually in May or June and after a gestation period of seven months. Young deer, called fawns, wear a reddish-brown coat with white spots that helps them blend in with the forest.

White-tailed deer are herbivores, grazing on most available plant foods. Their stomachs allow them to digest a varied diet, including leaves, twigs, fruits and nuts, grass, corn, alfalfa, and even lichens and other fungi. White-tailed deer are primarily nocturnal or crepuscular, browsing mainly at dawn and dusk.

In the wild, white-tails, particularly the young, are preyed upon by bobcats, mountain lions, and coyotes. They use speed and agility to outrun predators, sprinting up to 30 miles per hour and leaping as high as 10 feet and as far as 30 feet in a single bound.

Although previously depleted by unrestricted hunting in the United States, strict game-management measures have helped restore the white-tailed deer population.

## **RIVER OTTER**



The North American river otter is equally at home in the water and on land. This member of the weasel family makes its home in a burrow near the water's edge, and can thrive in river, lake, swamp, or estuary ecosystems. Otter abodes feature numerous tunnels—one of which usually allows them to come and go from the water. Otters swim by propelling themselves with their powerful tails and flexing their long bodies. They also have webbed feet, water repellent fur to keep them dry and warm, and nostrils and ears that close in the water. They remain active in winter, using ice holes to surface and breathe but can hold their breath underwater for some eight minutes.

Otters hunt at night and feed on whatever might be available. Fish are a favorite food, but they also eat amphibians, turtles, and crayfish.

On land, river otters can run quite well, however not quite as well as they swim. They love to slide down snow-covered, icy, or muddy hills—often ending with a splash in the water. Otter families of mother and children can be seen enjoying such fun, which also teaches survival skills.

Males do not help raise young otters. Females retreat to their underground dens to deliver litters of one to six young. When the young are only about two months old, they get an advanced swimming lesson—their mother pushes them into the water. Otters are natural swimmers and, with parental supervision, they soon get the hang of it.

Otters are also very sensitive to environmental pollution.



## **RAT**

The two most common species of rat are the black rat and the brown rat. Both species of rat are found in all parts of the world. The rat is now one of the most widely spread and adaptable animals in the world. The rat is a small scavenger that has proved to be a pest in both urban and rural areas where rats are normally present due to an abundance of food.

The rat can also carry and spread disease to a devastating effect although diseases carried by rats are generally not passed on to humans. However, in the middle ages, the black plague wiped out nearly two thirds of the European population. The disease was not caused by the rats directly but was actually caused by infected fleas carried on rats.

In the wild, rats are preyed upon by many different animals including snakes, wildcats and birds of prey. In some cultures rats are hunted and eaten as food by humans.

Today, rats are commonly kept as pets all over the world and are thought to have been bred as pets since the 1800s. Pet rats pose the same health risks to humans as other household animals so are not seen to carry harmful diseases. When tame, rats can be extremely friendly and can be taught to perform selective tasks such as doing certain actions in order to get food.

Rats are fast breeders and give birth to large litters of baby rats meaning that pet rats of different sexes should be separated at around a month old. Rats are able to start having babies at around 5 weeks of age and female rats give birth to litters of between 6 and 10 baby rats after a gestation period of 22 days. Although rats can live until they are 4 or 5 years old, female rats can no longer have babies after they are about 18 months old.

Rats are omnivores – they eat a mixture of plant and animal matter in order to get all the right nutrients.

Moles are a small mammals that are most well known for living in tunnels underground. Moles are commonly found in Europe, Asia, South Africa, and North America. Moles have long, curved claws which they use to burrow underground. They can quickly create long tunnels under the surface of the earth and the tunnel entrances can easily be identified by the mounds of earth that appear. These mounds of soil are commonly known as mole hills.

There are around 20 different species of mole found in their natural, earthy environments. Some species of mole are also aquatic or at least semi-aquatic which means that these mole species spend at least some of their time in the water.

Many of the different species of mole are very similar in appearance. The oddest exception to this is the star-nosed mole that inhabits parts of Canada and the northeastern United States. The star-nosed mole can be easily identified by the distinctive star shaped ending to the star-nosed moles snout.

Moles are omnivores that primarily feed and hunt earthworms. The saliva in the mouth of the mole contains a toxin that can paralyze small animals such as earthworms meaning that not only is the mole able to eat its catch successfully but it can also store food to eat later. Moles are known to construct special underground larders in which they store food.

The eyes and ears of the mole are very small and usually covered in fur. The small eyes of the mole are thought to have become like this due to the mole not using its eyes and through natural selection. The most powerful sense of smell a mole has is its sense of smell, and some species of mole (such as the star-nosed mole) are able to detect, catch and eat their prey in less than a second! Moles breed in early spring with the female moles gestation period lasting about a month. The female mole then gives birth to between 2 and 6 mole babies. Baby moles are usually completely independent within a month after birth. The average lifespan of a mole is about 4 years but some species of mole have been known to live until they are 6 or 7 years old.

When moles are in their burrows they are relatively safe from harm but due to their small size, moles are preyed on by mammals, birds and reptiles when the moles are above ground.

## **MOLE**







## **VOLE**

The vole is a mouse like rodent, related to the lemmings. They are found in a wide variety of habitats. They typically make runways under dense vegetation or shallow burrows in the ground. They feed chiefly on grasses but also eat bark, leaves, seeds, and insects. They are known in North America as field mice or meadow mice. Like lemmings and various other small rodents, voles periodically undergo population explosions which cause them to swarm over the countryside. Species of the North American genus *Phenacomys* nest in trees and are known as tree mice or lemming mice. The sagebrush vole, *Lagarus curtatus*, is found in the western United States. Voles are classified in the phylum Chordata, subphylum Vertebrata, class Mammalia, order Rodentia, family Crecetidae.

## **BAT**



Bats are found all around the world and there are hundreds of different species of bat, living in caves and forests, particularly in the Southern Hemisphere. Bats hunt at night using their exceptional sight to pick out their prey, generally insects, frogs and small rodents.

Some species of bat are known to fly at extreme heights, sometimes up to 2 miles above the ground! The bats senses are so fine tuned that it is thought that some bats can hear footsteps 6 miles away.

Bats have a slight sixth sense known as echolocation. This means that the bat creates a series of supersonic sounds, which the bat then uses to locate prey by the sounds that are reflected back to them.

Unlike most species of animal, bats are found in any environment around the world excluding the polar regions. Despite what myths you may have heard, only three species of bat feed on animal blood and they all live in the deep jungles of South America, not Transylvania.

Beavers are most well known for their distinctive home-building that can be seen in rivers and streams. The beavers dam is built from twigs, sticks, leaves and mud and are surprisingly strong. Here the beavers can catch their fish and swim in the water. Beavers are nocturnal animals existing in the forests of Europe and North America (the Canadian beaver is the most common beaver). Beavers use their large, flat shaped tails, to help with dam building and it also allows the beavers to swim at speeds of up to 30 knots per hour.

The beaver colonies create one or more dams in the colonies' habitat to provide still, deep water to protect against predators. Beavers also use the deep water created using beaver dams and to float food and building materials along the river.

In 1988 the North American beaver population was 60-400 million. Recent studies have estimated there are now around 6-12 million beavers found in the wild. The decline in beaver populations is due to the beavers being hunted for their fur and for the beaver's glands that are used as medicine and perfume. The beaver is also hunted because the beavers harvesting of trees and the beavers flooding of waterways may interfere with other human land uses. Beavers are known for their danger signal which the beaver makes when startled or frightened. A swimming beaver will rapidly dive while forcefully slapping the water with its broad tail. This creates a loud slapping noise, which can be heard over large distances above and below water. This beaver warning noise serves as a warning to beavers in the area. Once a beaver has made this danger signal, nearby beavers dive and may not come back up for some time. Beavers are slow on land, but are good swimmers and can stay under water for as long as 15 minutes at a time. In the winter the beaver does not hibernate but instead stores sticks and logs underwater that the beaver can then feed on through the cold winter.

## **BEAVER**

