

BAT-EARED FOX

GROUP 1: MAMMALS

ORDER
CarnivoraFAMILY
CanidaeGENUS & SPECIES
Otocyon megalotis

The bat-eared fox is one of the most peculiar members of the dog family. It has extremely large ears, which it uses to locate

KEY FACTS



SIZES

Length: Head and body, 1½-2 ft.
Tail, 9-13 in. Females slightly larger.

Ears: 4-5 in.

Height at shoulder: 12-16 in.

Weight: 6-12 lb.



BREEDING

Sexual maturity: 1-2 years.

Gestation: 9-10 weeks.

No. of young: 2-6.



LIFESTYLE

Habit: Lives in burrows.

Diet: Mainly termites, beetles, small mammals, reptiles, birds' eggs, fruit, and vegetable tubers.


Lifespan: Longest in captivity, 13 years 9 months.



RELATED SPECIES

Although visibly similar to the fennec fox, this unusual member of the dog family more closely resembles the raccoon dog and the gray foxes.



 Range of the bat-eared fox.

DISTRIBUTION

Two distinct ranges: southern Sudan to southwestern Tanzania in the north; Angola to central South Africa in the south.

CONSERVATION

The bat-eared fox has decreased in areas where human activity is greatest, particularly in South Africa. But it seems to be expanding its range into Mozambique, Zimbabwe, and Botswana.

FEATURES OF THE BAT-EARED FOX

Feeding: While searching for food, the fox constantly moves its head and ears from side to side to pinpoint any sounds it might hear.

Coat: General coloring is grayish yellow with dark brown edge around ears, feet, and tip of tail. Underparts are a dull grayish yellow.

Head: The muzzle is short and pointed. The ears are very large and oval-shaped.

Body: Short and compact, with a long, bushy tail and short legs.





The bat-eared fox lives in two separate regions in eastern and southern Africa. This division of its range is not recent. Nor is it the result of human activity. Instead, the separation appears to have occurred many thousands of years ago because of a change in the African climate.

BREEDING

The breeding habits of the bat-eared fox vary throughout its range. In the north it establishes territories during the breeding season and marks them with the scent of urine. But in the south the territories of several adults often overlap.

The bat-eared fox mates for

life, and pairs form very strong bonds. Two months after mating, the female gives birth to two to six cubs. They nurse for up to 15 weeks, but they may be weaned in four weeks.

The cubs first leave the den at about two and a half weeks. If danger threatens, the adults

grab them by the scruff of the neck and carry them to safety. Fully grown by six months, the cubs remain with their parents until the next year.

Below: In spite of the mother's continual presence, less than half of the litter survives through the first year.

Left: Bat-eared foxes rest outside their burrows before hunting.



DID YOU KNOW?

- The bat-eared fox eats scorpions, swallowing the stinger and the poison sac without ill effects.
- The bat-eared fox has such sharp hearing that it can detect prey even underground. But its eyesight is

not very good, and it is frequently unable to spot small mammals or reptiles unless they move.

- The bat-eared fox is also known as the long-eared fox, the big-eared fox, and the black-eared fox.

HABITAT

The bat-eared fox is most at home in the arid plains and savannas of eastern and southern Africa. Although it prefers open country, where the grass is short, it also inhabits brush and scrublands.

For protection from the elements and its many enemies, the bat-eared fox finds shelter in a deep den. It either digs this den itself or takes it over from other burrowing animals. The den is often several feet deep and contains more than one underground chamber with a number of entrances.

When patrolling its territory or searching for food, the bat-eared fox turns, twists, and doubles back on itself to confuse the hounds, jackals, and birds of prey that pursue it

FOOD & HUNTING

The bat-eared fox is the only member of the dog family that feeds almost entirely on insects. Insects can make up 80 percent of its diet. Termites, especially harvester termites, are such an important part of its diet that the fox's range

closely mirrors that of the termite. Dung beetles are another popular food. The fox digs them up from the ground, where the larvae are buried in balls of manure.

The bat-eared fox's small teeth are suited to its insect

diet. It has as many as eight *molars*—teeth that are better for crushing than chewing.

In addition to insects, the bat-eared fox feeds on small mammals, the eggs and young of ground-nesting birds, fruit, and tubers.



Right: Like many other members of the dog family, the bat-eared fox is very sociable.

Left: With its ears pointing forward, a bat-eared fox listens for the sound of grubs moving under the ground.

BAT-EARED FOX & MAN

After the leopard, humans are the greatest enemy of the bat-eared fox. People hunt the fox for its soft, dense fur, particularly during the colder months from April to July, when the fox's coat is at its best. The fox is also hunted by farmers who

do not realize that its small teeth are no threat to livestock.

In some areas, however, the bat-eared fox is actually extending its range, helped by the conversion of wood and scrublands into open pastures for cattle.





ROCK HYRAX

GROUP 1: MAMMALS

ORDER
Hyracoidea

FAMILY
Procaviidae

GENUS & SPECIES
Procavia capensis



The rock hyrax is a furry, compact animal that lives among rocky outcrops and isolated mountains on the plains and

KEY FACTS



SIZES

Length: 12-23 in.
Height: 8-12 in.
Weight: Male, 9 lb.
Female, 8 lb.



BREEDING

Sexual maturity: 16-17 months.
Mating: The main pairing season is between February and March.
Gestation: 7-8 months.
Litter size: 2-3.



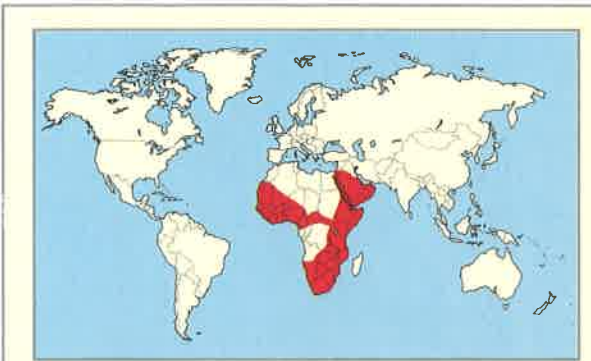
LIFESTYLE

Habit: Lives in family groups. Active by day, making short feeding trips or sunbathing.
Diet: Mainly leaves from trees and plants, but also grass.
Lifespan: Up to 12 years has been recorded.



RELATED SPECIES

There are two other genera, each with several species. These are the bush hyraxes and the tree hyraxes.



■ Range of the rock hyrax.

DISTRIBUTION

Found from Lebanon southward throughout most of Africa.

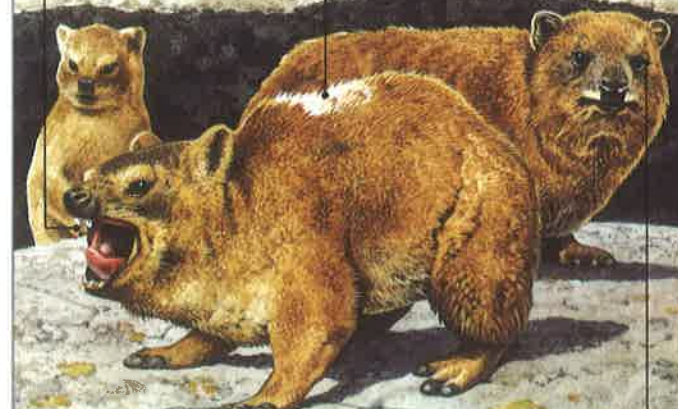
CONSERVATION

Despite its slow breeding rate and the constant threat to its habitat, the rock hyrax is surprisingly stable. Certain species of hyrax, however, are threatened because they are hunted for their valuable fur.

FEATURES OF THE ROCK HYRAX

Teeth: The incisors are used against predators—not for eating. These sharp teeth can inflict a vicious bite.

Scent gland: A narrow, bare scent gland surrounded by hair runs along the back. It is not certain what this gland is used for, but when the animal is frightened or excited the gland erects the fur around it.



Eyes: The hyrax has sharp eyesight, and the shape of its eyes is unique. The iris bulges out above the pupil, cutting off light from directly above its head. This enables it to look almost directly into the sun and keep

Feet: The front feet have 4 toes; the back have 3. The soles are covered with a rubbery pad that secretes a sticky sweat, giving the hyrax an excellent grip as it climbs over the rocks.



Although the rock hyrax looks very much like a rodent and grows to the size of a rabbit, it is actually closely related to the elephant. Its nails resemble hooves, and its feet have special sticky pads that help it move easily around the steep rocks of its habitat.

HABITS

The rock hyrax lives in family groups, or colonies, with a dominant male and several adult females presiding over their young. Juvenile males live on the edges of the family's territory, which is defended by the adult male. Families live in rock crevices, where they take shelter and sleep. On especially cold nights the animals huddle together for warmth.

In the morning the family basks in the sun, until one of the adults goes off to eat and is

dominant male keeps watch while the others feed. If a predator appears, he utters a warning cry that sends the whole group back into the rocks.

Hyraxes use the same place for urinating and defecating. The urine leaves white crystalline deposits on the rocks. The crystalline deposits as well as the feces were used by South African tribes to make perfume and medicine in the past.

Above: *The sticky soles of the rock hyrax's feet make perching*

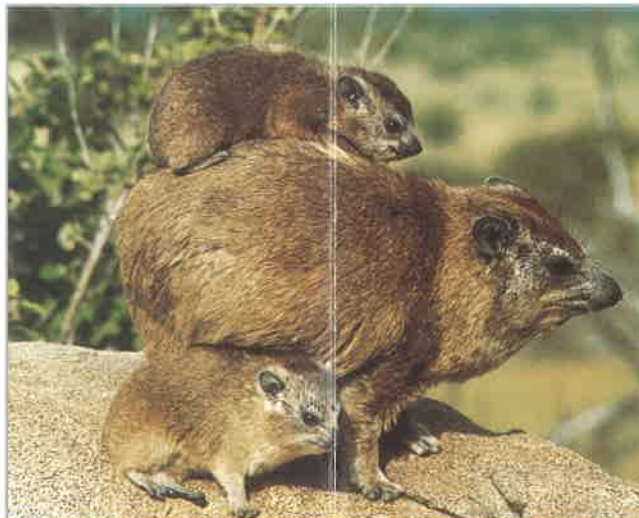


SPECIAL ADAPTATIONS

The rock hyrax is very nimble, with feet that are well developed for life among the rocks. The hyrax can easily climb steep, smooth surfaces because the soles of its feet form suction pads and se-

crete a sticky liquid. Its hoof-like nails also help it grip slippery rocks.

The front feet have four toes; the back feet have three. The middle toe of each back foot has a grooming claw.



Right: *When threatened, the hyrax bares its sharp incisors to warn off the intruder.*

FOOD & FEEDING

The rock hyrax feeds mainly on tree leaves, but it also eats grasses and young shoots of plants and shrubs. Like many other mammals that eat tough vegetation, the rock hyrax has microorganisms in its stomach that help break down food and make it easier to digest.

The hyrax has strong incisor teeth, but it uses them for defense rather than for feeding. When it eats, the hyrax turns its head sideways and uses its cheek teeth to bite off the grass and leaves.

DID YOU KNOW?

- Hyraxes are very vocal. There are 21 different calls on record, from chattering to screaming.
- The rock hyrax is able to eat very poisonous plants without suffering any apparent ill effects.
- When little water is available, the rock hyrax can get enough water from its food.
- The rock hyrax sometimes shares its territory with the bush hyrax and occasionally with agamid lizards, band-necked mongoose, or baboons.

BREEDING

The rock hyrax has a very long period of *gestation* (pregnancy) for such a small animal—seven to eight months.

A litter usually contains two or three young. The youngsters are suckled by the mother, who has two nipples at her shoulder and four around her crotch. Each youngster has its own nipple and may not drink from any other.

In six months the young are weaned, but they remain in the family until they reach sexual maturity at about 16 months. The males then wander off to establish new family colonies or to form bachelor groups.

The rock hyrax is closely related to the bush hyraxes. They are different species and do not interbreed. But they live in close harmony, even sharing the same sleeping caves. This acceptance of another species is known among no other ani-

Left: *Hyraxes form kindergartens, with one adult looking after a*

VIRGINIA OPOSSUM

CARD 176



GROUP 1: MAMMALS

ORDER
Marsupialia

FAMILY
Didelphidae

GENUS & SPECIES
Didelphis virginiana



The Virginia opossum is one of more than 70 opossum species in America. It has adapted to the presence of people, and its

KEY FACTS



SIZES

Length: Head and body, 15-20 in.
Weight: 9-13 lb.



BREEDING

Sexual maturity: Female, before 1 year. Male, later.

Mating: Summer in the United States; throughout the year in the tropics.

Gestation: 12-13 days.

No. of young: Usually 6-9.



LIFESTYLE

Habit: Active at night.

Diet: Widely varied, including insects, meat, eggs, plants, and small mammals.



RELATED SPECIES

There are more than 70 opossum species in the Americas, including the murine opossum, *Marmosa murina*, and the water opossum, or yapok, *Chironectes minimus*.



Range of the Virginia opossum.

DISTRIBUTION

Found in the United States, east of the Rocky Mountains. Also occurs in Mexico and Central America. Introduced and now thriving on the Pacific coast from San Diego to British Columbia.

CONSERVATION

Although it is hunted by humans, the Virginia opossum is in no danger of extinction.

FEATURES OF THE VIRGINIA OPOSSUM

Fur: Coarse. May be black or brown in southern parts of its range; gray or white in northern parts.

Tail: Naked and almost as long as the body. Black near the body, otherwise pale. It is *prehensile* (capable of grasping), and the opossum can curl it around a branch and hang upside down.

Ears: Paper-thin and hairless. Opossum has excellent hearing.

Facial fur: Always white, regardless of body color.



Hind feet: Four digits and a "thumb" to aid

Playing dead: If threatened, the opossum may fake death by going limp, with eyes shut and tongue lolling.





The Virginia opossum carries its numerous young in a rear-opening pouch. About the size of a cat, it has coarse bushy fur, a long snout, and large, bare gray ears. This opossum also has an extra-long prehensile tail with which it can grip branches when scrambling about in the trees.

HABITS

The Virginia opossum occupies a home range of about one-tenth of a square mile, usually in wooded country and near a stream. It spends most of its time on the ground, but it may climb a tree in an emergency or when searching for food.

The opossum's hands and feet have five digits each. Its hind feet are adapted for climbing, with the big toe positioned like a human thumb.

The animal's long, naked tail is *prehensile* (capable of grasping), and the young opossum uses it to hang from a branch.

A night creature, the Virginia

opossum sleeps by day in a nest of dead leaves that is inside a hollow tree, under dead brush, or in an abandoned burrow.

To collect leaves for its nest, the opossum picks them up in its mouth, passes them back between its front legs, and tucks them between its belly and its tail, which it folds up under its body. During very cold weather the opossum saves energy by lowering its temperature and entering a *torpor* (inactive state). It does not hibernate completely but lives off reserves of body fat stored during the fall.

FOOD & FEEDING

The Virginia opossum is a versatile feeder, eating insects, fruit, eggs, rotten meat, small mammals, and garbage scraps. At times it raids poultry runs. The opossum tends to eat plants in late fall and winter, when other sources of food become scarce.

Although its senses of sight and smell are only average, the Virginia opossum has excellent hearing, which it uses when searching for live prey.

Left: The young opossum is independent just four weeks after leaving its mother's pouch.



Left: The opossum usually sleeps during the day and forages for food at night. When food is scarce, it may have to travel far in order to find enough nourishment for its family. Here an opossum yawns after spending a long night foraging.



SPECIAL ADAPTATIONS

The term "playing possum" comes from the opossum's ability to play dead. When faced with a predator, the opossum hisses and squirts a foul-smelling liquid. But if seized by a predator, the

opossum goes limp, with its eyes shut and tongue lolling out. When the attacker loses interest and leaves, the opossum recovers fully.

Scientists do not know how the opossum manages this

trick. Some say that chemicals released into the brain cause a temporary coma, but recordings of brain activity show that while feigning death the opossum is actually in a highly alert state.

BREEDING

The female opossum's gestation lasts 12 to 13 days, and, like other marsupials, she gives birth to tiny embryos. Born in quick succession, the poorly developed young immediately struggle up through the mother's fur toward the pouch that opens to the rear. As each baby opossum reaches the pouch, it grasps a nipple in its mouth, and it does not let go for the next 10 weeks. Most females have 13 nipples, so if there are more than 13 babies, those

Left: At 10 weeks of age, these young are developed enough to travel on their mother's back.



DID YOU KNOW?

- A female may give birth to as many as 25 young in just five minutes.
- Newborn Virginia opossums are so tiny that 24 of them would fit into a teaspoon.
- Some Virginia opossums live so far north that they lose part of their tail and ears to frostbite.
- A closed pouch may contain up to six percent carbon dioxide.
- Opossum meat is a delicacy in the South.



Above: The opossum relies on its excellent hearing to detect the rustling of hidden prey.

who do not act fast will die.

After 10 weeks in the pouch, the young move to the nest, where they sleep huddled together. By then they are the size of small rats, and their mother carries them all on her back when she goes out foraging. The young are weaned soon after, and by 14 weeks they are fully independent.

The female breeds before her first birthday and may have three litters a year. The lifespan of the Virginia opossum is rarely longer than two years.



ELEPHANT SHREW

GROUP 1: MAMMALS

ORDER
Macroscelidea

FAMILY
Macroscelididae

GENUS
Elephantulus, Macroscelides, others



There are several species of elephant shrew living in a variety of habitats in Africa. In spite of their name, elephant shrews

KEY FACTS



SIZES
Length: Body, 4-12 in. Tail, 4-10 in., depending on species.
Weight: 1 oz.-1 lb.



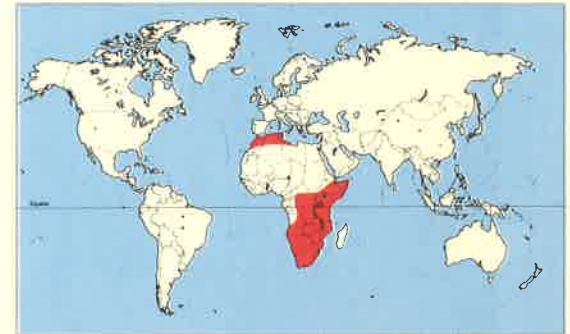
BREEDING
Sexual maturity: 3-6 months.
Breeding: Breeds several times a year, depending on the species, climate, and food.
Gestation: Larger species, 2 months. Smaller species, 1½ months.
No. of young: 1 or 2, rarely 3.



LIFESTYLE
Habit: Most active at dawn and dusk. Generally solitary but shares territory with mate.
Diet: Insects, snails. Some species eat roots, fruits, and seeds.
Lifespan: 2-4 years in the wild. Up to 5 years in captivity.



RELATED SPECIES
Elephant shrews are placed in their own order. They are not related to other shrew species.



Range of elephant shrews.

DISTRIBUTION

Deserts, semiarid areas, plains, tropical lowland forests, and savanna in northern, eastern, central, and southern Africa.

CONSERVATION

Although elephant shrews live in small populations, most are not in danger of extinction. The habitats of some forest-dwelling species are at risk as land is cleared for farming and developed for tourists.

FEATURES OF ELEPHANT SHREWS

Coat: Varies according to species. Usually there are shades of yellow and brown, often with black markings. This coloring provides camouflage. Desert-dwelling species have white underparts that reflect heat.

Ears and eyes: Large for the animal's size. Useful for finding prey and detecting predators.



THE HOPPING HIND LEGS

Powerful thighs and long hind legs let elephant shrews quickly leap away from predators.

Tail: Long and ratlike. In some species the underside is covered with knobbed bristles that are thought to help detect ground vibrations.

Snout: Long and trunklike to help the shrew forage for food. Long tongue



Elephant shrews are named for their tapering, trunklike snouts, which they use to probe the ground for insects and roots. They are also called jumping shrews because of their large, powerful hind legs. Some species have yellow, brown, and black fur in patterns that help to camouflage them against predators.

HABITS

Elephant shrews are found in various habitats, from deserts and semiarid regions to grasslands and tropical forests. These daytime creatures have peaks of activity at dawn and dusk.

Small species, such as the short-eared and bushveld elephant shrews, live in shallow burrows in soft ground or sand. In hard or rocky soil, shrews take over abandoned rodent burrows or use rock crevices. Many forest species sleep in leaf nests on the ground. They select a different nest each night from 12 or more they have made within their territory.

Two forest-dwelling species, the four-toed and rufous elephant shrews, live entirely in the open. They rely on trail systems that crisscross their territories to run from predators. The trails are worn smooth and kept clear of leaves, twigs, and other obstacles.

These species fiercely defend a territory, which they mark with small piles of manure. Each territory has a breeding pair, but the individuals live apart most of the time.

Right: *The short-nosed elephant shrew prefers the soft soil of African scrubland.*

FOOD & FEEDING

Elephant shrews feed during the day, especially in the cool of morning and early evening. They hunt alone, and it is rare even for a breeding pair to share prey. Most species feed on insects, particularly ants and termites, but some also eat roots, fruits, and seeds.

Using their long, trunklike snouts, large elephant shrews probe for insects among leaves and undergrowth. They look

Left: *Elephant shrews mainly eat spiders and a variety of insects.*

on the ground and just below the surface, and they dig out prey with the long claws on their forefeet.

Small species usually take small insects from the surface of soil, twigs, and fallen leaves. All species have long tongues, which they use to flick small prey into their mouths. They tear large prey into manageable pieces with their sharp claws and teeth.

Right: *During the day, elephant shrews patrol their territory.*

DID YOU KNOW?

- Elephant shrews communicate mainly by scent. Some species also drum their back feet on the ground to create vibrations, while others slap their tails on the ground.
- Fossils suggest that elephant shrews shared a common ancestor with rabbits

and hares over 100 million years ago.

- The golden-rumped elephant shrew can move at 15 miles per hour across open forest floor—as fast as a running human.
- In Kenya, large elephant shrews are cooked and eaten.



BREEDING

Most elephant shrews breed throughout the year, regardless of where they live. The gestation period varies from one and a half months for small species to two months for larger elephant shrews. Each litter consists of one or two young, although the giant

elephant shrew and North African elephant shrew often give birth to three.

The female gives birth in a burrow or nest of leaves that is well hidden from predators. At birth elephant shrews are well developed and have all their fur. They can leave the nest with their mother after a few days and are fully weaned at three to four weeks. Many species are fully grown at two months and begin to breed during their first year.

Left: *The elephant shrew's sensitive whiskers and long snout help it find insects to eat.*



COLLARED PECCARY

CARD 161



GROUP 1: MAMMALS

ORDER
Artiodactyla

FAMILY
Tayassuidae

GENUS & SPECIES
Tayassu tajacu



The collared peccary resembles the wild pigs of the Old World but is found only in the Americas. Its numbers are declining, mainly because

KEY FACTS



SIZES
Height: 12-16 in.
Weight: 35-55 lb.



BREEDING
Sexual maturity: Female, 7½ months. Male, 10½ months.
Mating: Fall in the tropics.
Gestation: About 5 months.
No. of young: 2-3.



LIFESTYLE
Habit: Sociable. Lives in family groups of up to 15 and herds of up to 50.
Call: Distinctive calls, including coughlike warning noise and laughterlike sound of aggression.
Lifespan: 8-10 years in the wild. Up to 21 years in captivity.



RELATED SPECIES
The other species of peccary are the white-lipped peccary, *Tayassu pecari*, and the Chacoan peccary, *Catagonus wagneri*.



Range of the collared peccary.

DISTRIBUTION

Found in wet and dry tropical forests, chaparral, and grasslands from the southwestern United States through Central America and as far south as Argentina.

CONSERVATION

The collared peccary is threatened by habitat destruction as land is cleared for farming. It is also killed to keep it from eating crops.

FEATURES OF THE COLLARED PECCARY

Face glands: Located below each eye. Used for scent identification.

Body: Deep and bulky but compact with a distinctive collar of grayish white fur. Scent glands are located on the back about 8 inches from the tail.



Tusks: Short, notched tusks protruding from upper jaw are used to dig up vegetation

Stomach: Because the peccary has a more complex stomach than the wild pig, it can digest large amounts of

PECCARY AND WILD BOAR



Toes: The wild boar has four toes on each foot, but the peccary has only three toes on its hind feet.



Tusks: The wild boar (above) has tusks that curve upward. The peccary's shorter tusks grow downward.



Left: *The collared peccary's bulky body is supported by graceful legs that make it agile enough to outrun predators.*

Right: *Cacti are a staple in the collared peccary's diet in the dry parts of its range. Its complex stomach allows the peccary to eat food that many species cannot digest.*

FOOD & FEEDING

The collared peccary eats roots, fruit, and seeds. In some areas its main food is cacti. It also eats insects and other small invertebrates. It locates food with its sensitive snout, then digs it up with its short, sharp tusks. This method can damage crops.

Like the domestic cow, the peccary has a two-chambered stomach that allows it to digest the high cellulose content of its food. It uses its powerful jaws to crush seeds, and it chews with an up-and-down movement instead of the circular motion of other hoofed mammals.



The collared peccary gets its name from the grayish

white band of fur that encircles its neck.

Although the peccary looks like a wild pig,

its tusks are shorter and less visible

than the pig's, and its digestive system

more closely resembles that of a cow.

DID YOU KNOW?

- The collared peccary is known by several names: baquiro, chacaro, javelina, and javali.
- A peccary can move with equal ease on land and in the water.

- One peccary will divert a predator while the rest of the family group escapes.
- There have been campaigns to kill the collared peccary because of the damage it does to crops.



Left: *The peccary's sensitive snout is useful for ground-level foraging.*

HABITS

The collared peccary lives in a herd of up to 50 individuals. A herd contains family groups—each with up to 15 members. The herd stays together all year, but each family uses a different part of the herd's territory. Territories range from 0.2 to 3 square miles.

The collared peccary has a scent gland below each eye and one on its back. Within a group, individual animals rub their face glands together to mark each other. This action

another and strengthen family bonds. The back scent gland is used to mark rocks and tree trunks within the herd's territory.

The collared peccary is most active in the cooler parts of the day. In early morning it often plays with others in its family. It uses a wide range of sounds to communicate. These sounds include a coughing noise that is made by an adult male to collect a scattered group, a short alarm call, and a laugh



BREEDING

The collared peccary's breeding season is determined by the latitude of its habitat. In the tropics mating takes place most often in fall. The female is sexually mature at 34 weeks and the male at 47 weeks. The peccary does not seem to have courtship rituals, and a female mates with several males from her herd.

The young are born after a gestation period of about five

Left: *The young peccary is tended by both parents and members of its family group.*

months. The female leaves the herd to give birth to two or three young in a sheltered place. She rejoins the herd with her offspring a few days later. Young peccaries feed on their mother's milk for six to eight weeks, but they eat some solid food after three weeks.

Both parents care for the young, bringing them food and protecting them from predators such as jaguars or mountain lions. Other members of the family group also help raise the young.



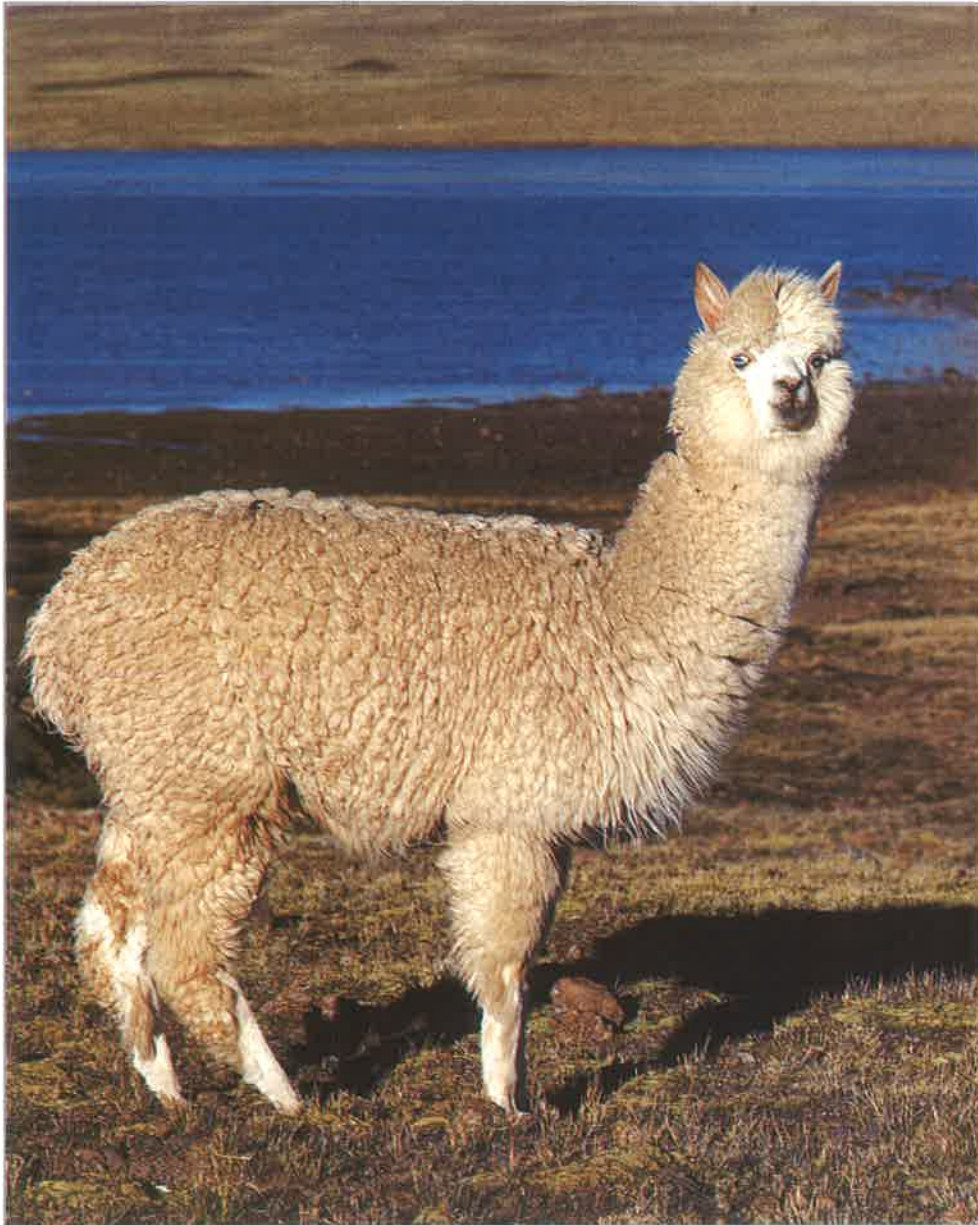
ALPACA

GROUP 1: MAMMALS

ORDER
Artiodactyla

FAMILY
Camelidae

GENUS & SPECIES
Lama pacos



The alpaca is a domesticated member of the camel family that lives in South America. Its thick wool coat enables it to survive in

KEY FACTS



SIZES

Height: 3-3½ ft.
Weight: 120-145 lb.



BREEDING

Sexual maturity: Usually 2 years.
Breeding season: August to September.
Gestation: 11 months.
No. of young: 1.



LIFESTYLE

Habit: Social; active by day.
Diet: Grass and similar herbage. Chews cud (ruminates).
Lifespan: Kept only to about 7 years on farms. Probably 25 years if it lived in the wild.



RELATED SPECIES

Of the 6 kinds of camel, the alpaca's closest relatives are the llama, *Lama glama*; the guanaco, *L. guanicoe*; and the vicuña, *Vicugna vicugna*.



Range of the alpaca.

DISTRIBUTION

Found from southern Peru to northern Chile and Argentina. With the growing demand for alpaca wool, large herds are being built up in South America and the United States.

CONSERVATION

There are currently more than three million alpacas, and their numbers are rising as interest in farming them grows.

FEATURES OF THE ALPACA

Young: Weighs 20 pounds at birth and grows to about 65 pounds at 9 months, when it is weaned. Its soft, creamy white coat may darken as it matures.

Mouth: Divided top lip and continually growing lower teeth allow close grazing of tough grasses.

Coat: Fine, even wool that grows continually. Little difference in length between undercoat and guard hairs. Color varies from pure white to rich brown. Also white and brown patches.





The alpaca is farmed for its wool, which helps to insulate the animal and keep it warm at high altitudes. It has long been believed that the alpaca was bred from the wild guanaco, a related South American species. But recent information suggests that the alpaca was derived from a cross between the domesticated llama and the vicuña.

HABITAT

The alpaca has been domesticated and is no longer truly wild. But alpacas graze freely over the high mountains, forests, and coastal plains of Peru, Bolivia, Argentina, and Chile.

The alpaca is farmed in the greatest numbers on the Peruvian *altiplano*, or high plain, which is about 12,500 feet above sea level. The natural vegetation there is tussock grass, but some farmers have begun to improve the pasture

to increase the productivity of their alpacas.

The alpaca is also numerous high in the Andes mountains, where the vegetation is sparse, the terrain rough, and the air very thin. The temperature there can vary as much as 86 degrees between day and night, and the yearly rainfall is between one and three feet.

Right: The alpaca prefers tender grass shoots but can digest almost any vegetation.

BREEDING

The wild relatives of the alpaca live in groups made up of an adult male, several females, and young. These families sometimes form larger groups. In each group only the dominant male mates with the females. The males frequently fight for control of the females.

Breeding of domesticated alpacas is controlled. Males and females are usually separated, and only selected males are allowed to breed. Nonbreeding males are castrated, which eliminates their

sex drive and prevents them from fighting.

The alpaca mates in August and September. One offspring is born after about 11 months. It may put on 45 pounds in the first nine months and grows quickly until it is three years old.

The females usually breed only every other year. The alpaca's reproductive rate is not high because there are many miscarriages and many young die from food shortages and the demands of life at a high altitude.

Left: The alpaca has been a valuable domesticated animal for over 2,000 years.

Right: The young alpaca is on its feet within an hour of birth. It grows quickly.

DID YOU KNOW?

- The camel family is the only mammal family with oval (not round) red blood cells.
- The alpaca and its relatives walk on pads at the end of their toes instead of their hooves so they can travel easily over rocky ground.
- The alpaca and its South

American relatives have a high number of red blood cells, so they can extract enough oxygen from the thin mountain air.

- The alpaca interbreeds successfully with all other South American camels but only mates freely with the llama.



ALPACA & MAN

The alpaca was first bred by the Incas about 500 B.C. and has been bred ever since for its wool, meat, skin, and milk. Its manure is used for fuel.

Increasingly, however, the alpaca is being farmed purely as a wool producer. Peru supplies almost all of the world's alpaca fiber, exporting 90 per-

cent of it. The wool that is not exported is woven into ponchos, blankets, and rope.

As demand for its wool increases, the alpaca is replacing the llama as South America's most important domestic animal. The llama's role as beast of burden is declining with increased use of cars and trucks.

FOOD & FEEDING

The alpaca, like other members of the camel family, has a divided top lip. With this lip and its continually growing lower teeth, the alpaca can graze on the tough grass it must eat to survive.

It grazes in small groups, moving slowly and searching for the most tender shoots. Food is often scarce, but the alpaca can survive on very little. In the winter, farmers may provide additional fodder,

such as grass or alfalfa hay.

The alpaca feeds by day and sleeps at night. Twice a day it sits down to *chew the cud*, regurgitating partly digested food and chewing it over again. When the food is swallowed again, it passes through the animal's second and third stomachs. This process of re-chewing and reswallowing food is called *ruminating* and extracts maximum nutrition from poor grazing.



SPRINGBOK

CARD 163

GROUP 1: MAMMALS

ORDER
Artiodactyla

FAMILY
Bovidae

GENUS & SPECIES
Antidorcas marsupialis



The springbok is a gazelle that lives in the dry plains of southern Africa. It gets its name from the stiff-legged, sprinaina movement

KEY FACTS



SIZES

Length: Male, 4-5 ft. Female, slightly shorter.

Height to shoulder: Male, 2½-3 ft. Female, slightly shorter.

Weight: Male, 50-100 lb. Female, 40-70 lb.



BREEDING

Sexual maturity: Female, 6-7 months. Male, 1 year.

Mating: Varies across range.

Gestation: About 5½ months.

No. of young: 1, occasionally 2, depending on conditions.



LIFESTYLE

Habit: Sociable. Forms harem during mating season.

Diet: Grass, leaves, and shoots.

Lifespan: About 10 years in captivity.



RELATED SPECIES

The only species in its genus but closely related to other gazelles, including Thomson's gazelle.



Range of the springbok.

DISTRIBUTION

Found in dry, open plains and scrubby hills in southern Africa and north to Angola.

CONSERVATION

The springbok is still common in remote parts of its range but is no longer found in huge herds. In South Africa the springbok was almost wiped out to prevent crop damage, but it has since been successfully reintroduced.

THE SPRINGBOK'S HORNS



Male: Up to 19 inches and heavily ridged. They spread widely, then end in sharp tips pointing inward.

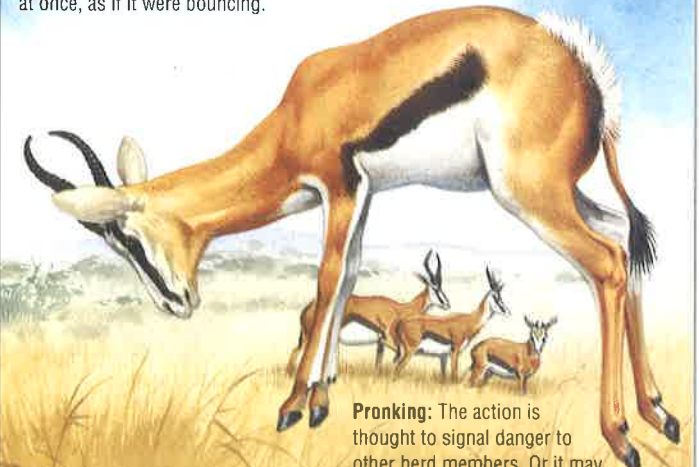


Female: Up to 14 inches. They spread less than the male's and

THE SPRINGBOK'S PRONK

The springbok *pronks* when alarmed or when playing. It leaps up with its legs almost rigid and head bowed, taking off and landing on all four feet at once, as if it were bouncing.

Rump: A triangle of coarse white fur on the rump normally lies flat. It stands up and becomes visible when the animal is excited.



Pronking: The action is thought to signal danger to other herd members. Or it may be meant to confuse and intimidate predators.