# CHEETAHS

http://animals.nationalgeographic.com/animals/mammals/cheetah/

The cheetah is the world's fastest land mammal. With acceleration that would leave most automobiles in the dust, a cheetah can go from 0 to 60 miles (96 kilometers) an hour in only three seconds. These big cats are quite nimble at high speed and can make quick and sudden turns in pursuit of prey.

Before unleashing their speed, cheetahs use exceptionally keen eyesight to scan their grassland environment for signs of prey—especially antelope and hares. This big cat is a daylight hunter that benefits from stealthy movement and a distinctive spotted coat that allows it to blend easily into high, dry grasses.

When the moment is right a cheetah will sprint after its quarry and attempt to knock it down. Such chases cost the hunter a tremendous amount of energy and are usually over in less than a minute. If successful, the cheetah will often drag its kill to a shady hiding place to protect it from opportunistic animals that sometimes steal a kill before the cheetah can eat. Cheetahs need only drink once every three to four days.

Female cheetahs typically have a litter of three cubs and live with them for one and a half to two years. Young cubs spend their first year learning from their mother and practicing hunting techniques with playful games. Male cheetahs live alone or in small groups, often with their littermates.

Most wild cheetahs are found in eastern and southwestern Africa. Perhaps only 7,000 to 10,000 of these big cats remain, and those are under pressure as the wide-open grasslands they favor are disappearing at the hands of human settlers.

## http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-cheetah.cfm

GEOGRAPHIC DISTRIBUTION

CHEETAH Order: Carnivora Family: Felidae Genus and Species: Acinonyx jubatus THE WORLD'S FASTEST LAND MAMMAL IS VULNERABLE TO EXTINCTION THROUGHOUT ITS RANGE PHYSICAL DESCRIPTION Built more like greyhounds than typical cats, cheetahs are adapted for brief but intense bursts of speed. They have wiry bodies and small heads. Their coats are golden or yellowish, embellished with many small black spots, and their tails are long with a few black bands and sometimes a white tip. Black stripes run from their eyes down to the corners of their mouths. SIZE Cheetahs grow to between three and a half and four and a half feet long, not including their 30inch tails. They weigh between 75 and 145 pounds and stand two to three feet tall at the shoulder. Males tend to be a bit more robust and weigh about ten pounds more than females. Cheetahs live in small, isolated populations mostly in sub-Saharan Africa. They are very rare in southern Algeria and northern Niger, and range from Senegal east to Somalia and south to northern South Africa. A few have been reported from Iran. However, many of their strongholds are in eastern and southern African parks.

STATUS

The cheetah is listed as vulnerable on the World Conservation Union's (IUCN's) Red List of Threatened Animals.

HABITAT

Savannas, both open and more densely vegetated, give cheetahs the open areas they need for quick stalks and chases. They are not found in forest areas or wetlands.

## NATURAL DIET

Cheetahs eat primarily hoofed mammals weighing less than 90 pounds, including gazelles and young wildebeest. They will also eat smaller game such as hares, warthogs, and birds. NATIONAL ZOO DIET

The Zoo's cheetahs eat ground horse meat and sometimes beef, rabbits, and chicks. REPRODUCTION

Cheetahs can breed at any time of year but tend to copulate in the dry season, with cubs being born at the onset of the wet season. Females reach breeding age by 21 or 22 months of age. Males live in small permanent groups called coalitions, which are usually made up of brothers. Males are drawn to females in heat, but only one male in a coalition usually mates with the selected female. On average, three cubs are born about three months after mating takes place. Until five or six weeks old, the cubs remain hidden; if she needs to move, the mother carries them from place to place. After five or six weeks, cubs follow their mothers and share her kills. Cheetah cubs wean at about three months old.

LIFE SPAN

In zoos, cheetahs may live up to 17 years, though the average is 8 to 12. No one has studied cheetah longevity in the wild, though cub mortality is very high and about 90 percent die before they are 3 months old.

## BEHAVIOR

Female cheetahs live alone, except when raising cubs. They rarely associate with other cheetahs, except when ready to mate. Males live in small permanent groups called coalitions, which are usually made up of two to four brothers. To avoid lions and leopards, cheetahs usually hunt in the middle of the day. Cheetahs stalk their prey, approaching to within about 50 feet before dashing out from cover and sprinting at the targeted animals. Cheetahs grab their victims' throats and suffocate their quarry within a few minutes. After securing their meal, they may drag it to nearby cover. Despite their best efforts to hide their catches, their kills are often stolen by larger predators and picked at by hordes of vultures. Lions and hyenas also eat cheetah cubs; lions and leopards also kill adults.

# PAST/PRESENT/FUTURE

Once widespread across arid Africa, into the Middle East and east to India, the cheetah has suffered dramatic declines over the last century. It now lives in Africa, and a few may survive in Iran. Hunted for their spotted coats and because they sometimes attack livestock, they disappeared from many areas. More recently, widespread habitat destruction has fragmented cheetah habitats, isolating many populations. In many areas, the cheetah's prey has been overhunted by people. Scientists have also found that many cheetahs suffer from genetic defects due to inbreeding, possibly the result of a population bottleneck—a sharp decline—that occurred perhaps as far back as 10,000 years ago. Among other things, inbreeding could raise cub mortality, lower cheetahs 'resistance to disease, and cause infertility. An estimated 8,000 to 10,000 wild cheetahs survive. Cheetah strongholds, where possible, must be connected to allow

genetic interchange if this species is to survive. Also, conflict between cheetahs and humans needs to be moderated. For example, in Namibia, ranchers may legally shoot cheetahs that prey on livestock.

FUN FACTS

A sprinting cheetah can reach 45 miles per hour within 2.5 seconds. Top speed—up to 64 miles per hour—can only be briefly sustained.

In the 16th century, emperors and other royalty hunted gazelles with trained cheetahs. A FEW CHEETAH NEIGHBORS

Thomson's gazelle (Gazella thomsonii): Within its range, this smallish, striped animal is a favored prey of the cheetah.

Beisa oryx (Oryx gazella beisa): A large, long-horned antelope with black stripes on its flanks and face.

Vulturine guineafowl (Acryllium vulturinum): A bare-headed gamebird with dazzling black, blue, and white plumes.

By saving cheetah habitat, we protect these and many other animals.

https://www.awf.org/wildlife-conservation/cheetah

QUICK FACTS Scientific name: Acinonyx jubatus

Weight: 110 to 140 lb.

Size: 30 in. at the shoulder

Life span: 10 to 20 years

Habitat: Open plains

Diet: Carnivorous

Gestation: 90 to 95 days

Predators: Eagles, humans, hyenas, lions

#### Where do cheetahs live?

The cheetah's habitat has been reduced by 76%, and they occur widely but sparsely in the regions they still inhabit. Southern and Eastern Africa are strongholds for cheetah populations.

#### What do cheetahs look like?

Cheetahs have long, slim, muscular legs; a small, rounded head set on a long neck; a flexible spine; a deep chest; special pads on its feet for traction; and a long tail for balance. It is also the only cat that cannot retract its claws, an adaptation to help maintain traction like a soccer player's cleats. It also bears distinctive black "tear tracks" running from the inside corner of each eye to the mouth, which may serve as an anti-glare mechanism for daytime hunting.

The cheetah is a fast but timid predator.

Cheetahs usually prey on small antelopes such as Thomson's gazelles and impalas, but they also hunt small mammals and birds. The cheetah gets as close to the prey as possible, then in

a burst of speed, it tries to outrun its quarry. Once the cheetah closes in, it knocks the prey to the ground with its paw and suffocates the animal with a bite to the neck. Once a cheetah has made a kill, it eats quickly and keeps an eye out for scavengers—lions, leopards, hyenas, vultures, and jackals will steal from this timid predator.

## Cheetahs are a little introverted.

The cheetah is basically a solitary animal. At times, a male will accompany a female for a short while after mating, but most often, the female is alone or with her cubs. Cheetah mothers spend a long time teaching their young how to hunt. Small, live antelopes are brought back to the cubs so they can learn to chase and catch them.

#### http://cheetah.org/about-the-cheetah/for-kids/

Cheetah Speed :The cheetah is the world's fastest land animal. They can run 70 mph (or 110 kph), which is as fast as cars drive on the highway. The cheetah can reach its top speed in just 3 seconds!

Tail like a rudder: The cheetah has a long, muscular tail that has a flat shape. The tail almost functions like a rudder on a boat because they use it to help control their steering and keep their balance when running very fast.

Special cleat feet: The cheetah has "semi non-retractable" claws (almost like dog claws) that work like the cleats on a football shoe to give the cheetah a lot of traction when running. The pads of most cats' paws are soft, but the cheetah's pads are hard kind of like the rubber on a tire. This also helps them grip the ground when they are running so fast.

Like football players: Cheetahs have "tear marks" that run from the inside corners of their eyes down to the outside edges of their mouth. These marks help reflect the glare of the sun when they are hunting during the day. They work just like the black marks that football players put under their eyes during the games. These marks also work like the sights on a rifle, to help the cheetah "aim" and stay focused on their prey when they are hunting.

Spotted Skin: The cheetah's fur is covered in solid black spots, and so is their skin! The black fur actually grows out of the black spots on their skin.

Almost like flying: When cheetahs are running full speed, their stride (length between steps) is 6-7 meters (21 feet). Their feet only touch the ground twice during each stride.

A cheetah's favorite food: Cheetahs are carnivores, and feed mostly on smaller antelope like springbok, steenbok, Thomson's gazelle, and duiker. They usually chase down their prey and then bite its throat, killing it by cutting off its air supply (suffocation).

Not just a funny haircut: Cheetah cubs have long tall hair that runs from their neck all the way down to the base of their tail, which is called the mantle. The mantle makes a cheetah cub look like a honey badger and makes them blend into tall grass, which helps keep them safe from threats like lions and hyenas.

A lot of kids: A mother cheetah usually cares for anywhere from 2 to 8 cubs per litter, but cubs are often the target of other predators and many do not survive past the first year.

Most endangered cat: There are only 10,000 cheetahs left in the wild, making the cheetah Africa's most endangered big cat.

# http://kids.nationalgeographic.com/animals/lion/

# OVERVIEW

For all of their roaring, growling, and ferociousness, lions are family animals and truly social in their own communities. They usually live in groups of 15 or more animals called prides. Prides can be as small as 3 or as big as 40 animals. In a pride, lions hunt prey, raise cubs, and defend their territory together. In prides the females do most of the hunting and cub rearing. Usually all the lionesses in the pride are related—mothers, daughters, grandmothers, and sisters. Many of the females in the pride give birth at about the same time. A cub may nurse from other females as well as its mother. Each pride generally will have no more than two adult males.

While the females usually live with the pride for life, the males often stay for only two to four years. After that they go off on their own or are evicted by other males who take over the pride. When a new male becomes part of the pride it is not unusual for him to kill all the cubs, ensuring that all future cubs will have his genes. The main job of males in the pride is defending the pride's territory. A male's loud roar, usually heard after sunset, can carry for as far as five miles (eight kilometers). The roar warns off intruders and helps round up stray members of the pride.

Hunting generally is done in the dark by the lionesses. They often hunt in groups of two or three, using teamwork to stalk, surround, and kill their prey. Lionesses aren't the most successful of hunters, because they usually score only one kill out of several tries. After the kill the males usually eat first, lionesses next—and the cubs get what's left. Males and females fiercely defend against any outside lions that attempt to join their pride.

## http://animals.nationalgeographic.com/animals/mammals/african-lion/?source=A-to-Z

Lions are the only cats that live in groups, which are called prides. Prides are family units that may include up to three males, a dozen or so females, and their young. All of a pride's lionesses are related, and female cubs typically stay with the group as they age. Young males eventually leave and establish their own prides by taking over a group headed by another male.

Only male lions boast manes, the impressive fringe of long hair that encircles their heads. Males defend the pride's territory, which may include some 100 square miles (259 square kilometers) of grasslands, scrub, or open woodlands. These intimidating animals mark the area with urine, roar menacingly to warn intruders, and chase off animals that encroach on their turf.

Female lions are the pride's primary hunters. They often work together to prey upon antelopes, zebras, wildebeest, and other large animals of the open grasslands. Many of these animals are faster than lions, so teamwork pays off.

After the hunt, the group effort often degenerates to squabbling over the sharing of the kill, with cubs at the bottom of the pecking order. Young lions do not help to hunt until they are about a year old. Lions will hunt alone if the opportunity presents itself, and they also steal kills from hyenas or wild dogs.

Lions have been celebrated throughout history for their courage and strength. They once roamed most of Africa and parts of Asia and Europe. Today they are found only in parts of sub-Saharan Africa, except for one very small population of Asian lions that survives in India's Gir Forest.

## http://nationalzoo.si.edu/animals/greatcats/lionfacts.cfm

LION FACTS Smithsonian's National Zoo's Lion Cubs Are Growing! Female lions lack manes. Class: Mammalia Order: Carnivora Family: Felidae Species: Panthera leo

The world's most social felines, lions usually get by with a little help from their pride mates. PHYSICAL DESCRIPTION:

Lions have strong, compact bodies and powerful forelegs, teeth, and jaws for pulling down and killing prey. Their coats are yellow-gold. Adult males have shaggy manes that range in color from blond to reddish-brown to black, and length. The length and color of the mane is believed to be determined by such factors as age, genetics, and hormones. Young lions have light spotting on their coats that will disappear as they grow up. SIZE:

Male lions grow larger than females, reaching up to ten feet long (females reach up to nine feet long), plus a two- to three-foot-long tail. Male lions weigh from 330 to 550 pounds; females weigh 265 to 395 pounds. Lions stand between three and a half and four feet tall at the shoulder.

## **GEOGRAPHIC DISTRIBUTION:**

Except for a small population that hangs on in the dry Gir Forest of northwest India, lions now live only in Africa. They are found from the Sahara's southern fringe to northern South Africa, but are absent from equatorial areas dominated by moist tropical forest. STATUS:

The lion is listed as vulnerable on the World Conservation Union's (IUCN's) Red List of Threatened Animals. The Gir Forest population, which consists of about 300 lions, is listed as endangered.

## Habitat:

Lions inhabit a wide range of habitats, from open plains to thick brush and dry thorn forest. NATURAL DIET:

Lions eat primarily large animals, such as zebra and wildebeest, weighing from 100 to 1,000 pounds. In times of shortage, they also catch and eat a variety of smaller animals from rodents to reptiles. Lions steal kills from hyenas, leopards, and other predators, but may also lose their catches to hyena groups. Lions may also feed on domestic livestock, especially in areas near villages.

NATIONAL ZOO DIET:

Keepers feed the Zoo's lions beef. Twice a week the lions received bones (usually a beef hind shank, half femur, or knuckle).

REPRODUCTION:

Female lions usually give birth to a litter every two years. Females are receptive to mates for a few days several times a year, unless they are pregnant or nursing. Mating spurs ovulation. Females give birth to one to six cubs after a gestation of about three and a half months. Cubs nurse for six months, but start eating meat at three months. Due to varied dangers, including starvation during times of food shortage and attacks by male lions taking over prides, 60 to 70 percent of lion cubs die within their first two years of life.

LIFE SPAN:

Zoo lions typically live into their late teens or early 20s. Male lions in the wild live about 12 years; females live about 15 years.

## **BEHAVIOR:**

Lions live in groups of related females called prides, which may comprise several to as many as 40 individuals, including adults, sub-adults (two to four years old) and cubs, plus one or more resident males. Abundance of prey availability plays a significant role in the size of a lion pride. Pride mates associate in sub-groups within the pride.

Females stay in their mothers' prides for life, unless food scarcity forces them out. Young males are driven from their prides when they grow large enough to compete with the dominant males. Young males join in coalitions, usually with brothers and cousins, and search for a pride to take over. Males entering a new pride will kill all cubs that cannot run from them. Adult males that are fortunate enough achieve residency within a pride hold tenure for an average of two years, often leaving due to eviction by another coalition of males. In India, female and male lions live apart, joining only to mate.

Males take on most of defense duties, however, both males and females will mark their territories by roaring and scent marking (urine). Females raise the cubs and are the primary hunters, although males will sometimes join the females during a hunt. Nomadic males must hunt alone or scavenge from other animals. During a hunt several lions stalk prey from different angles to within 100 feet before attacking the targeted animal.

## PAST/PRESENT/FUTURE:

More than 10,000 years ago, lions thrived from North and South America to Europe, Africa, and Asia. Today, following climatic changes and after centuries of hunting and habitat degradation by people, lions live in scattered habitats across Africa (with the exception of the Gir Forest lions, which live in a park in northwest India). Within these areas, lions still face dangers, including habitat loss and hunting. Many have died from diseases such as distemper, which is spread by domestic dogs from villages near natural habitat.

To keep lions from becoming as rare as tigers, large expanses of suitable habitat with sufficient prey must be carefully protected. In disease-ridden areas, free-ranging domestic dogs must be kept away from lions or immunized. Meanwhile, the isolated Gir Forest lions have a limited amount of habitat, and frequent conflicts with people. For this population to grow, some of its lions must be moved to other reserves or the Gir Forest protected area must be expanded. At the same time, continuous conflicts between lions and people who live near them must be mitigated.

## A FEW LION NEIGHBORS:

spotted hyena (Crocuta crocuta): Africa's second largest carnivore (after lions) is also one of the lion's greatest competitors for prey.

wildebeest (Connochaetes taurinus): Also called a gnu, this strange-looking, migratory animal is the most abundant antelope on East and southern African plains. It is an important food for lions.

plains zebra (Equus burchellii): Another important prey species of lions, zebras wander widely across the East and southern African plains.

chital (Axis axis): Also called spotted deer, these Asian deer are important prey for India's lions.

By saving lion habitat, we protect these and many other animals. FUN FACTS: Tigers are lions' closest relatives. Without their coats, lion and tiger bodies are so similar that only experts can tell them apart. A lion's roar can be heard up to five miles away. A male coalition rarely holds onto a pride longer than two to three years before being run off by

A male coalition rarely holds onto a pride longer than two to three years before being run off by fierce challengers

http://animals.sandiegozoo.org/animals/lion

Mammals | LION

ABOUT FUN FACTS AT THE ZOO CONSERVATION Range: Africa and Asia Habitat: Grassy plains, savannas, open woodlands, and scrubland King of the jungle, forest, and savanna

Lions have captured our imagination for centuries. Stars of movies and characters in books, lions are at the top of the food chain. The Swahili word for lion, simba, also means "king," "strong," and "aggressive." The word lion has similar meaning in our vocabulary. If you call someone lionhearted, you're describing a courageous and brave person. If you lionize someone, you treat that person with great interest or importance.

Prime habitat for lions is open woodlands, thick grassland, and brush habitat where there is enough cover for hunting and denning. These areas of grassland habitat also provide food for the animals lions prey upon.

## **Mane Attraction**

Lions differ from the other members of the large cat genus, Panthera—tigers, leopards, and jaguars. Adult male lions are much larger than females and usually have an impressive mane of hair around the neck. The color, size, and abundance of the mane all vary among individuals and with age. The mane's function is to make the male look more impressive to females and more intimidating to rival males. The lion's thick mane also protects his neck against raking claws during fights with other males over territory disputes or breeding rights.

## Living with (a) pride

Lions are also the only cats that live in large, social groups called "prides." A pride can have 3 to 30 lions and is made up of lionesses (mothers, sisters, and cousins), and their cubs, along with a few unrelated adult males. The pride has a close bond and is not likely to accept a stranger. The unrelated males stay a few months or a few years, but the older lionesses stay together for life. In dry areas with less food, prides are smaller, with two lionesses in charge. In habitats with more food and water, prides can have four to six adult lionesses. Both males and females scent mark to define their territory.

All for one and one for all

Living in a pride makes life easier. Hunting as a group means there is a better chance that the lions have food when they need it, and it is less likely that they will get injured while hunting. Lion researchers have noticed that some activities are "contagious" within a pride. If one lion yawns, grooms itself, or roars, it sets off a wave of yawning, grooming, or roaring!

## You go, girls!

Lions and lionesses play different roles in the life of the pride. The lionesses work together to hunt and help rear the cubs. This allows them to get the most from their hard work, keeping them healthier and safer. Being smaller and lighter than males, lionesses are more agile and faster. During hunting, smaller females chase the prey toward the center of the hunting group. The larger and heavier lionesses ambush or capture the prey. Lionesses are versatile and can switch hunting jobs depending on which females are hunting that day and what kind of prey it is.

## A king's life

While it may look like the lionesses do all the work in the pride, the males play an important role. While they do eat more than the lionesses and bring in far less food (they hunt less than 10 percent of the time), males patrol, mark, and guard the pride's territory. Males also guard the cubs while the lionesses are hunting, and they make sure the cubs get enough food. When a new male tries to join a pride, he has to fight the males already there. The new male is either driven off or succeeds in pushing out the existing males.

## Lions lying around

A lion's life is filled with sleeping, napping, and resting. Over the course of 24 hours, lions have short bursts of intense activity, followed by long bouts of lying around that total up to 21 hours! Lions are good climbers and often rest in trees, perhaps to catch a cool breeze or to get away from flies. Researchers have often noticed lions lying around in crazy poses, such as on their backs with their feet in the air or legs spread wide apart!

## I hear you

Lions are famous for their sonorous roar. Males are able to roar when they are about one year old, and females can roar a few months later. Lions use their roar as one form of communication. It identifies individuals, strengthens the pride's bond, and lets other animals know of the pride's domain. Other sounds lions produce include growls, snarls, hisses, meows, grunts, and puffs, which sound like a stifled sneeze and is used in friendly situations.

Lions have other forms of communication as well, mostly used to mark territory. They spread their scent by rubbing their muzzle on tufts of grass or shrubs, and they rake the earth with their hind paws, as the paws have scent glands, too. Adult males also spray urine—stand back!

## Dinner at dusk and dawn

Lions usually hunt at night, particularly at dusk and dawn, with lionesses doing most of the work. A lion chasing down prey can run the length of a football field in six seconds. Their eyes have a horizontal streak of nerve cells, which improves their vision following prey across a plain. Lions

Lions hunt antelope and other hoofed animals, baby elephants or rhinos, rodents, reptiles, insects, and even crocodiles. They also scavenge or steal prey from leopards, cheetahs, hyenas, or wild dogs, even eating food that has spoiled. Lions digest their food quickly, which allows them to return soon for a second helping after gorging themselves the first time.

At the San Diego Zoo and the San Diego Zoo Safari Park, the lions get lean ground meat made for zoo carnivores as well as an occasional large bone, thawed rabbit, or sheep carcass.

# Lion school begins early

A lioness gives birth to her cubs in a secluded location away from the pride. At birth, each cub's coat is yellowish brown and marked with distinct dark, rosette-shaped spots or, sometimes, stripes. Cubs remain hidden for four to six weeks as they gain strength, learn to walk, and play with one another and their mother. When they return to the pride, they can nurse from any adult lioness in the pride, not just their own mother. In fact, the females in a pride often give birth around the same time, which makes for lots of playmates!

Cubs born in a pride are twice as likely to survive as those born to a lioness that is on her own. However, if a new adult male takes over the pride, he may kill cubs under one year old so that he can father new ones. Under favorable conditions, a lioness can produce cubs roughly every other year.

From the time they are born, cubs have a lot to learn! At three months old, cubs are able to follow their mother wherever she goes, and they are weaned by the age of six months. At about one year old, males start to get fuzz around their neck that grows into the long mane adult male lions are famous for.

How long a lion cub stays with Mom depends on the sex of the cub. Mothers generally raise males until they are just about two. Once they hit that stage in life, the mother usually runs them out of the group, and they are on their own. Sometimes the sub-adult males form bachelor groups and run together until they are big enough to start challenging older males in an attempt to take over a pride. If the cubs are female, Mom cares for them until about two years of age and they usually stay with the pride they were born into. A mother and daughter may live together for life.

## Nomads seeking territory

Lions that do not live in prides are called nomads, and they range far and wide while following migrating herds of large game. Nomads are generally young males, roaming in pairs or small groups and often related to one another. Females are occasionally nomadic, too. For reason not clearly understood, young females are sometimes driven from their pride just as are young males. As they gain in age and experience, nomadic males may challenge established pride males for dominance of a given territory and its pride of lionesses, or they may join nomadic females and form a new pride.

# HYENA

## http://animals.nationalgeographic.com/animals/mammals/hyena/?source=A-to-Z

Spotted hyenas are famed scavengers and often dine on the leftovers of other predators. But these hardy beasts are also skilled hunters that will take down wildebeest or antelope. They also kill and eat birds, lizards, snakes, and insects.

In an increasingly overpopulated Africa, hyenas and humans come into frequent contact. In fact, the Maasai people of Kenya and Tanzania actually leave their dead to be consumed by hyenas. However, these intelligent and bold animals will raid food stores and crops and are blamed for many livestock and even some human deaths. In some areas they have been heavily hunted as destructive pests.

Spotted hyenas are the largest of three hyena species. Brown and striped hyenas are the other two. Although hyenas appear similar to dogs, they are actually more closely related to cats. They live throughout much of Africa and eastwards through Arabia to India. Spotted hyenas live together in large groups called clans that may include up 80 individuals and are led by females.

Spotted hyenas have good hearing and sharp eyesight at night. They are fast and can run for long distances without tiring. Packs work together effectively to isolate a herd animal, sometimes one that is ill or infirm, and pursue it to the death. The victors often squabble over the spoils, either among themselves or with other powerful animals like lions.

Spotted hyenas are quite vocal and make a wide variety of sounds, including the "laughing" that has long been associated with their name.

# http://animals.sandiegozoo.org/animals/spotted-hyena

Range: Africa, south of the Sahara desert Habitat: Savanna, semi-desert, scrubland, swamp, open woodland, and montane regions

So, you think you know all about spotted hyenas—the ones known to "laugh"? They're in lots of cartoons and movies, and they're usually in the role of giggly villains. But is that a fair description?

It may look like a dog, but the spotted hyena is more closely related to cats, civets, and genets. Also called the laughing hyena, the spotted hyena is a strong, capable hunter. It is the largest member of the hyena family (other members are the striped hyena, brown hyena, and aardwolf). Female spotted hyenas are a bit larger than the males, but otherwise they look exactly the same.

One of a kind

The spotted hyena may look unusual, at first sight. It has a large head with a long, thick, muscular neck and powerful jaws that give the hyena the strongest bite of any mammal. Its front legs are longer than its back legs, giving the animal a profile somewhat like that of a wildebeest or bison. The spotted hyena's paws have four toes with non-retractable claws. The short, coarse fur has a yellow or gray tint covered in spots, which differ among individuals. Its ears are more rounded than that of the other hyenas. A short mane of hair along its back stands upright. Its only true predators are lions and humans.

## Staying cool

These interesting carnivores live in Africa south of the Sahara Desert. They are able to survive in savannas and swamps as well as semi-arid regions and even in mountainous forest areas. Rather than resting in dens, adult spotted hyenas sleep in holes or shallow pools or under bushes or scrubs—anywhere they can find shade during the heat of the day. Hyenas use watering holes as places to cool off or to hide extra food. Spotted hyenas can be active both day and night, depending on their needs and whether there are humans around, but they are generally nocturnal.

## Mortal enemies

Lions and hyenas compete over the same food in overlapping territories. Sometimes the hyenas do the work of organizing, chasing down, and killing prey only to have lions steal it. Lions often injure or kill hyenas as they fight over a carcass. Both hyenas and lions mark and establish territories, and both species are always on guard. When confronted by a lion, the spotted hyena calls for help from other hyenas.

## I'll eat that!

Spotted hyenas give new meaning to the phrase "lick the platter clean." They eat practically every part of the animal, including skin, hooves, bone, and teeth. Powerful jaws are able to crush bones with ease. Most other predators couldn't eat those things, even if they tried. There are some items that hyenas can't digest, such as hair and horns, although they still eat them.

At the San Diego Zoo, the spotted hyenas eat a fortified meat-based commercial carnivore diet. They also eat mice, rats, or rabbits once or twice a week. Treats for training purposes include beef heart, large rice-based chew bones, zucchini, cabbage, and carrots. Fish are offered as enrichment.

## Wildlife buffet

Most people think hyenas are scavengers only. Spotted hyenas do scavenge, but they have to compete with jackals and vultures for these leftovers. In a large group, spotted hyenas are able to chase lions away from a kill. But during a hunt, the hyena's impressive hunting skills come into play. They are able to chase down prey over long distances while running at up to 37 miles per hour (60 kilometers per hour).

Spotted hyenas often pick out the young or weak from the herd, but they can kill even healthy adults of many hoofed species. What they hunt depends on numbers. The bigger the hyena clan, the larger its prey. This can include young rhinos, adult wildebeest, zebras, and Cape

buffalo. The hyenas work in a group when hunting such large prey, and young hyenas take years to become successful. Smaller packs chase down gazelles, impalas, warthogs, and waterbucks.

When hunting alone, a spotted hyena may go after smaller prey. Ground birds, rabbits, springhare, bat-eared foxes, porcupines, jackals, and fish can be on the menu. Even ostrich eggs are fair game! A hyena can eat quite a bit at one time. Sometimes, leftovers are buried in a mud hole for a later meal.

## Whoop!

Spotted hyenas have distinctive vocalizations. In fact, they are the most vocal mammals in Africa, with over 11 different sounds that researchers have recorded. The famous giggle they produce sounds like a human laughing. This "laugh" is used during times of nervous excitement or submission to a dominant hyena. The "whoop" is a call heard for miles and is used to find cubs, advertise territory, or bring the clan together. Spotted hyenas can tell which individual makes the whoop. Groans and squeals are used to greet each other. Other sounds include grunting and growling. Hyenas also use their calls and scent marks to claim their territory.

## A complex clan

The spotted hyena social system is complex. There can be up to 100 individuals in a clan. Spotted hyenas have a matriarchal society. The females are larger and, on average, much more assertive and aggressive to the males. A low-ranking female's cubs rank higher than the highest-ranking adult immigrant male! Lower-ranking males are forced to stay on the outskirts of the clan and are only allowed to join during a hunt or a fight against another clan or lions.

## Tough cubs

Adult females give birth to cubs in isolated dens and later move their cubs to "kindergarten" in communal dens, which are holes previously dug by other animals such as aardvarks. Life starts out rough for a young hyena cub. The average litter has two cubs, and the competition between them starts right away. Cubs are born with dark fur, their eyes open, and some teeth already present. They fight over who will be the dominant one and nurse first, sometimes killing their weaker sibling. Mom keeps the cubs in a private den at first to ensure their survival.

At two to six weeks of age, the mother moves the cubs to a den shared by other mothers in the same clan and their young. Although there may be many cubs from different mothers, each mother nurses just her own. How they hunt, how they eat, and how they fight are all determined by rank within the clan. At about two months of age, the cub starts to lose its brown coat and begins to look like the spotted adults. The young continue to nurse until about one to two years old. Females stay with their birth clan, but the males leave upon maturity at around age three, if not sooner. Half of all spotted hyena young die before they reach maturity.

## Recycling experts of the Serengeti

Spotted hyenas play a major role in Africa. They help control populations of a wide variety of species. And, because they'll eat almost anything, they appear to clean up everything in their

path. While spotted hyenas are not threatened at the moment, things could change. Drought can have drastic effects on the food chain, from herbivores to carnivores.

#### Myth buster

The way hyenas are depicted—and have been for centuries—is no laughing matter. They are often vilified and misrepresented as foolish and treacherous, even downright vicious and evil. It's a reputation that these intelligent, resourceful, and efficient creatures do not deserve. Hyenas do not hunt humans, although there are rare reports of killings. Yet some humans shoot hyenas on the spot just because of what they are. The spotted hyena is a clever creature that should bring a chuckle to your heart!

#### http://www.bioexpedition.com/spotted-hyena/

SPOTTED HYENA Spotted Hyena

Class Mammalia Order Carnivora Family Hyaenidae Genus Crocuta Conservation status Least Concern

#### Introduction to Spotted Hyena

The Spotted Hyena is often called the Laughing Hyena due to the sounds it makes that are so similar to a human laugh. These animals are often not given much credit for their contribution to the ecosystem. They are the subject of many forms of myths and folk tales throughout cultures around the world.

## Spotted Hyena Description

The body of the Spotted Hyena is long and slender. They are brown in color with black spots and a long tail. They are very similar in the looks of their face to wild canines. They have sharp teeth and when they move their lips they often look like they are smiling which further adds to the image that they are laughing. They have a very good sense of hearing and excellent vision.

#### Spotted Hyena Distribution

The Spotted Hyena has a big location where it is able to live around Africa, specially Sub-Saharan Africa. They tend to stick around areas of water. They know that is where they will have the best chance of being able to find enough food for survival. Due to the demise of their open range though their habitat has increasingly overlapped creating tensions. Spotted Hyena Behavior

One of the biggest battles out there for the Spotted Hyena has to do with the Lions. They tend to fight endlessly over food and territory. They live in clans that can have up to 80 members. The females are the leaders over those clans. There is a great deal of socialization and hierarchy in place in these clans.

The Spotted Hyena is a carnivore and they will hunt as well as consume food that has been left by other predators. They often consume what others left behind because they have teeth that allow it to be able to get through bones and other tough materials that those other hunters had to leave behind. They also have a digestive system that enables them to consume food that has been left rotting in the hot sun.

They are very skilled when it comes to hunting for their own resources of food. They will get several members to confuse the herd while others are focused on the target of prey that they plan to take down. This is how they often get wildebeest, impala, zebra and antelope. They can also hunt on their own for rodents, reptiles, birds, and insects.

One of the elements of the Spotted Hyena that make people uneasy is that they are said to consume humans. There are no records of them every actively hunting them. However, some cultures including those of people in Kenya and Maasai will leave the bodies of their dead for them to consume. They will kill livestock and they are bold in their efforts of raiding food supply locations of villagers.

## Spotted Hyena Reproduction

Mating can occur for the Spotted Hyena during any time of the year. As long as they have habitat and food they will do so. When those basic needs are being hard to find then they will be less likely to do so. Most of the births do occur during the wet seasons though. The males in a clan may become very aggressive in an effort to be able to get the approval of a female for mating with her.

After mating has occurred the gestation period is about 110 days. The females will find an abandoned den where they can call home in the weeks before they give birth. It isn't uncommon for several females and their young to all be found in the same den. She may have from 2 to 4 per litter. They can live up to 25 years in the wild.

# GAZELLE

#### http://animals.nationalgeographic.com/animals/mammals/gazelle/

#### Thomson's Gazelles

Gazelles are medium-sized antelopes found in Africa and in Asia as far east as Mongolia. There are some 19 different species of gazelles.

These grazing antelopes live in herds, which can consist of as few as ten or as many as several hundred animals. During the plentiful rainy season, thousands of animals can be seen gathering in large groups.

Gazelles typically frequent wide-open spaces and plains, where they browse on grasses, shoots, and leaves.

Open plains make them visible to predators like cheetahs or wild dogs, but gazelles are fleet of foot. The Thomson's gazelle can reach speeds of 40 miles (64 kilometers) an hour.

Some gazelle species eschew the grasslands for mountainous landscapes or even deserts. During the dry season some grassland gazelles will even take to the African bush in search of water.

Gazelles are nimble and beautiful animals, with a variety of stripes and markings that accentuate their tan buff coats and white rumps. They also boast a impressive, ringed horns. These attributes make many gazelles attractive as game animals.

After a pregnancy of about six months, female gazelles give birth to one or two young and hide them in the plains grasses. These infants will remain out of sight for days or even weeks, being periodically nursed by their mother, until they are old enough to join the mother's herd, in the case of females, or a bachelor herd.

#### http://www.livescience.com/27545-fun-facts-about-gazelles.html

Gazelles are thin, graceful antelopes that live in Africa and Asia. They resemble deer and are in the same family as goats, cattle and sheep. Gazelles can be identified by their curved, ringed horns, tan or reddish-brown coats and white rumps. Often, there are spots or stripes on their coats. Their light frames help make them agile and better able to escape from predators.

There are 19 species of gazelle, according to the Integrated Taxonomic Information System(ITIS). Smaller species, such as the Speke's gazelle and Thomson's gazelle, are only 20 to 43 inches (51 to 109 centimeters) at the shoulder. They weigh from 26 to 165 pounds (12 to 75 kilograms). The dama gazelle is the largest gazelle. It weighs in at 88 to 165 pounds (40 to 75 kg) and is 4.5 to 5.5 feet tall (137 to 168 cm).

#### Habitat

Most gazelles live in the hot, dry savannas and deserts of Africa and Asia. To stay hydrated in these grueling environments, gazelles shrink their heart and liver, according to a study published in the journal Physiological and Biochemical Zoology. Breathing can cause an animal

to lose a lot of water. A smaller heart and liver need less oxygen, so the animal can breathe less and lose less water.

The Edmi gazelle, also known as the Cuvier's gazelle, is the only gazelle that lives in the mountains. It migrates during the wintertime to warmer regions.

#### Habits

Gazelles rely on their speed to escape from predators. Gazelles can reach speeds up to 60 mph in short bursts and sustain speeds of 30 to 40 mph. When running, gazelles use a bounding leap, called "pronking" or "stotting," which involves stiffly springing into the air with all four feet.

These animals are highly social. Some gazelle herds have as many as 700 members, though some herds are small and segregated by gender. Female Thomson's gazelles, for example, live in herds of 10 to 30 females in addition to their young. Males live alone or in small groups with other males. A male herd is called a bachelor's herd. The segregation of herds is more prominent during mating season.

Baby GazellePin It A baby gazelle

Credit: Cleveland Metroparks ZooView full size image

Offspring

Mating season is usually timed to occur during the rainy season so that the newborn fawns will have plenty to drink.

Gazelles carry their young for around six months before giving birth. They have one to two young at a time. Baby gazelles are called fawns or calves.

To keep her calves safe from predators, a female gazelle will hide her babies in tall grasses. While the young are still nursing, they stay with their mother's herd. When they are ready to fend for themselves, male calves are moved to the male herd. Gazelles typically live 10 to 12 years.

Diet

Gazelles are herbivores. This means they only eat vegetation, typically grasses, leaves and shoots of plants. According to "Endangered Wildlife and Plants of the World, Volume 5" (Marshall Cavendish Corp., 2001) some gazelles can live their entire lives and never drink any water.

Classification/taxonomy The taxonomy of gazelles, according to ITIS, is:

Kingdom: Animalia Phylum: Chordata Subphylum: Vertebrata Class: Mammalia Order: Artiodactyla Family: Bovidae Genus: Gazella Species: 19, including G. thomsonii (Thomson's gazelle), G. spekei (Speke's gazelle), G. dorcas (Dorcas gazelle) and G. dama (dama gazelle). There are many vulnerable and endangered species of gazelle. For example, the Cuvier's gazelle's population is estimated at only 1,750 to 2,950, according to International Union for Conservation of Nature's Red List. Another endangered species is the slender-horned gazelle. It is estimated that there are only a few thousand left.

#### Conservation status

The dama gazelle is not only the world's biggest gazelle, it is also the rarest, according to the Smithsonian National Zoological Park. It is critically endangered and has a population of less than 500.

The major threat facing gazelles is hunting. The Queen of Sheba's gazelle became extinct when it was hunted for food in 1951 by soldiers, according to the IUCN.

Gazelles running through the sand. Pin It Gazelles running through the sand. Credit: Stephane OstrowskiView full size image Other facts The name gazelle comes from the Arabic "gazal," the term for love poems.

A gazelle will flick its tails or stomp its feet to warn others of a lurking predator.

The horns of the Edmi gazelle can grow to 14 inches (35.5 centimeters) long.

Goitered gazelles get their name from the large bump on their throats. The bump is larger on males. It is a large patch of cartilage that helps them bellow loudly to potential mates during mating season.

Gazelles can stand on their back legs to reach leaves high in the branches of trees.

## http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-dama.cfm

DAMA GAZELLE It's a Boy! Dama Gazelle Born at the Smithsonian's National Zoo Order: Artiodactyla Family: Bovidae Genus and Species: Gazella dama Also known as the addra gazelle, the dama gazelle is the largest of all gazelles. It is also the world's rarest. PHYSICAL DESCRIPTION This large gazelle has a slender neck and legs, and somewhat S-shaped horns. It is white with reddish-brown coloring, but the pattern varies by region. Dama gazelles in the western part of their range are more reddish-brown than those in the east. Coloration also varies by age and season. The head is typically pale. SIZE

This gazelle may have a shoulder height of nearly four feet. Its head and body length may range from four and a half to five and a half feet, and its tail may be up to a foot long. Adults may weigh 88 to 165 pounds.

The World Conservation Union's Red List of Threatened Species lists the dama gazelle as critically endangered. There may be only a few hundred of these gazelles left in the wild. GEOGRAPHIC DISTRIBUTION

Dama gazelles once ranged across northern Africa, from the Atlantic to the Nile. Now, they can be found in a few isolated areas in Chad, Mali, and Niger.

HABITAT

These gazelles live on Sahelian grasslands, savanna, and sub-desert steppes.

DIET

Dama gazelles eat shrubs, succulents, herbs, trees, and woody plants.

Dama Gazelle

REPRODUCTION

About six and a half months after mating, females give birth to a single fawn. It is weaned after about six months.

BEHAVIOR

They may lead a solitary life or live in a group of up to 15 individuals.

FUN FACT

Dama gazelles may stand on their hind legs to eat from acacia trees and other plants as high as six feet from the ground.

## http://www.outtoafrica.nl/animals/enggrantsgazelle.html

Grant's gazelle FACT FILE: Swahili Name: Swala Granti Scientific Name: Gazella granti Size: 30 to 36 inches at the shoulder Weight: 100 to 145 pounds Lifespan: 12 years Habitat: Open grass plains Diet: Herbivorous/browsers/grazer 7 months Gestation: Humans, all major predators Predators:

Grant's gazelles resemble Thomson's gazelles, and the two species are often seen together. They are similarly colored and marked, but Grant's are noticeably larger than Thomson's and easily distinguished by the broad white patch on the rump that extends upward, beyond the tail and onto the back. The white patch on the Thomson's gazelle stops at the tail. Some varieties of Grant's have a black stripe on each side of the body like the Thomson's gazelle; in others the stripe is very light or absent. A black stripe runs down the thigh.

## Physical Characteristics

The various types of Grant's gazelle differ mainly in color and in the size and shape of the horns. Grant's are large, pale, fawn-colored gazelles with long legs. The males are larger and heavier and their horns longer than the females.

The lyre-shaped horns are stout at the base, clearly ringed and measuring from 18 to 32 inches long. The width of the spaces between the horns and the angles of growth differ among the

various types of Grant's gazelles. One type, in northwest Tanzania, has widely diverging horns, with the tips directed downwards.

On the females black skin surrounds the teats, with white hair on the udder. This probably helps the young recognize the source of milk. When a fawn is older and moving about with its mother, the dark stripe on the white background may serve as a beacon for it to follow.

#### Habitat

Grant's gazelles are especially fond of open grass plains, and although they frequent bushy savannas, they avoid areas of high grass.

#### Behavior

Grant's gazelles may remain in areas where food is plentiful. Mature males establish territories they may hold as long as eight months. A male tries to detain the female herds of 10 to 25 individuals as they pass through these territories while they move about to feed. At the same time males chase off rival males and try to mate with females in estrus.

Grant's gazelles have developed several ritualized postures. For example, the territorial male stretches and squats in an exaggerated manner while urinating and dropping dung. This apparently warns other males to stay away and reduces the number of confrontations. Younger males will fight, but as they grow older the ritualized displays often take the place of fights. When fighting does occur, it also is ritualized. It starts with "pretend" grooming, repeated scratching of the neck and forehead with a hind foot and presenting side views of the body. If neither combatant is intimidated, they may confront one another and clash horns, trying to throw the other off-balance.

## Diet

The gazelles vary their diet according to the season. They eat herbs, foliage from shrubs, short grasses and shoots. Grant's gazelles are not restricted to certain habitats by a dependency on water, but obtain the moisture they need from their food. Grant's have unusually large salivary glands, possibly an adaptation for secreting fluid to cope with a relatively dry diet. They typically remain in the open during the heat of the day, suggesting an efficient system to retain the necessary fluid in their bodies.

## Caring for the Young

Breeding is seasonal, but not firmly fixed. Gestation is approximately 7 months, and the young are born in areas that provide some cover. The newborn fawn is carefully cleaned by the mother who eats the afterbirth. Once the fawn can stand up and has been suckled, it seeks a suitable hiding place. The mother watches carefully and evidently memorizes the position before moving away to graze. She returns to the fawn three to four times during the day to suckle it and clean the area. The lying-out period is quite long-two weeks or more.

The fawn eats its first solid food at about 1 month, but is nursed for 6 months. Grant's become sexually mature at about 18 months. By that time the young males will have joined an all-male bachelor herd, but it will be some time before they become territory holders, if at all. Males from the bachelor herds challenge the territorial males, but only the strongest win territories, which they mark with combined deposits of dung and urine.

## Predators

All the major predators kill Grant's gazelle, but cheetahs and African hunting dogs are the most prevalent. In some areas jackals prey on the young. Because of its adaptation to semi-arid and subdesert ranges as well as its good meat and valuable skin, Grant's gazelle has been one of the species that scientists consider as a potential source of protein for humans.

## Did you know?

The only relatively long-lasting relationship in gazelle society is that of a mother and her most recent offspring.

Grant's are gregarious and form the usual social groupings of small herds of females with their offspring, territorial males and all-male bachelor groups. Membership in these groups is temporary.

# ZEBRA

## http://animals.nationalgeographic.com/animals/mammals/zebra/

No animal has a more distinctive coat than the zebra. Each animal's stripes are as unique as fingerprints—no two are exactly alike—although each of the three species has its own general pattern.

Why do zebras have stripes at all? Scientists aren't sure, but many theories center on their utility as some form of camouflage. The patterns may make it difficult for predators to identify a single animal from a running herd and distort distance at dawn and dusk. Or they may dissuade insects that recognize only large areas of single-colored fur or act as a kind of natural sunscreen. Because of their uniqueness, stripes may also help zebras recognize one another.

Zebras are social animals that spend time in herds. They graze together, primarily on grass, and even groom one another.

Plains (Burchell's) zebras are the most common species. They live in small family groups consisting of a male (stallion), several females, and their young. These units may combine with others to form awe-inspiring herds thousands of head strong, but family members will remain close within the herd.

Zebras must be constantly wary of lions and hyenas. A herd has many eyes alert to danger. If an animal is attacked, its family will come to its defense, circling the wounded zebra and attempting to drive off predators.

## http://animals.sandiegozoo.org/animals/zebra

Range: Eastern and southern Africa

Habitat:

Mountain and plains zebras live in grasslands and savannas; Grevy's zebras live in sub-desert and arid grasslands

Reading between the lines

Despite their appearance, zebras aren't just black and white. They are sturdy, spirited animals that are a study in contrasts: willful and playful, social and standoffish, resilient and vulnerable. Their life in a herd can be complex, yet they also find safety in numbers. They are prey for predators, but they are by no means shrinking violets when it comes to defending themselves. Read between the lines, and you'll discover that the world of the zebra is colorful indeed!

## Wild horses

Zebras are equids, members of the horse family. They have excellent hearing and eyesight and can run at speeds of up to 35 miles per hour (56 kilometers per hour). They also have a powerful kick that can cause serious injury to a predator, like a lion, a hyena, or an African wild dog. Usually the lead male of the herd, called a stallion, sounds the alarm if danger is spotted

and stays at the back of the group to defend against predators if necessary, while the mares (females) and foals (youngsters) run away.

Zebras often trot when moving to new pastures, which is a fairly fast but easy gait for them to use over the long distances they may have to travel. Their hard hooves are designed to withstand the impact of their body weight and to run easily over rocky ground. When resting at night, zebras lie down while one stands watch to prevent an ambush.

## Stripes: White with black or black with white?

This is one of the most-asked questions about zebras. So what's up with the stripes? Zebras are generally thought to have white coats with black (sometimes brown) stripes. That's because if you look at most zebras, the stripes end on their belly and toward the inside of the legs, and the rest is all white. However (there had to be a catch, right?), some zebras are born with genetic variations that make them all black with white stripes, or mostly dark with the striped pattern on just part of their coats. And as it turns out, zebras have black skin underneath their hair. So it depends on how you look at it!

So, why the stripes? They serve as a kind of protection from predators! When zebras are grouped together, their combined stripes make it hard for a lion or leopard to pick out one zebra to chase. Zebra stripes are unique to each individual, and researchers in the field have used zebras' individual stripe patterns for identification.

## Not all zebras are created equal

It might seem like a zebra is a zebra, but there are three different species: plains, mountain, and Grevy's zebras. Different zebra species have different types of stripes, from narrow to wide. In fact, the further south on the African plains you travel, the farther apart the stripes on the zebras get! The basic form of zebras—a large head, sturdy neck, long legs, a dorsal stripe along the spine and down a tasseled tail, and bristly mane—is universal. No zebra, or other wild equid, has a forelock.

Now for the differences:

- The Grevy's zebra is the largest, weighing from 770 to 990 pounds (350 to 450 kilograms) and measuring up to 5 feet (1.5 meters) at the shoulder. Its thick neck and large, round ears give the Grevy's zebra the most mule-like physique. The Grevy's zebra also has the thinnest stripes, extending all the way down to their white belly; on the hindquarters the stripes are vertical until above the hind legs.

- A mountain zebra has vertical stripes on the neck and torso, which graduate to wider and fewer—horizontal bars on the haunches. It has a gridiron pattern on the rump, and its white underside has a dark stripe that runs the length of the belly. A mountain zebra also has a distinctive dewlap on the throat that looks a bit like an Adams' apple.

- The plains zebra is the most abundant and the smallest of the three zebra species. Some subspecies have a stripe pattern different from all others: brownish "shadow" stripes between the black stripes on their coat. Grevy's zebras live in semi-arid grassland habitat in Kenya, Ethiopia, and Somalia. Mountain zebras, as their name implies, inhabit rocky, arid slopes in Namibia and Angola. Plains zebras, which are the most abundant of the three zebra species, are found from the grasslands of East Africa to the scrubby woodlands of southern Africa. They are one of Africa's most successful and adaptable large herbivores. A subspecies of the plains zebra, the Grant's zebra, is famous for its spectacular migrations during the rainy season in the Serengeti, when as many as 10,000 of these animals can be seen journeying together in congregated herds.

## Mowing the fields

Zebras are herbivores and feed mostly by grazing on grasses, although they also might browse a bit on the leaves and stems of bushes. They graze for many hours each day, using their strong front teeth to clip off the tips of the grass. Their back teeth then crush and grind the food. Spending so much time chewing wears the teeth down, so those teeth keep growing all their lives.

As the dry season arrives and the grasses die back, zebra herds travel to find more food and water holes for drinking. Most zebras are considered nomadic, without specific territories. The exception is the Grevy's zebra. Stallions of this species mark out territories with urine and dung. The mares, their foals, and immature males wander through as they wish. If food becomes scarce, though, the stallions leave their territories for a while and travel with the larger herds.

Zebras at the San Diego Zoo and the San Diego Zoo Safari Park are fed hay, alfalfa, and carrots.

## Scratch my back and I'll scratch yours

Plains and mountain zebras are social herd animals, living in family groups with a stallion, several mares, and their offspring. During certain times of the year, these groups gather together to form loosely associated herds of up to several hundred, but the family groups still stay together within these larger groups. Grevy's zebras do not have a herd system, and males and females have no permanent bonds. Grevy's zebra stallions establish territories, with mares crossing through them to breed and foal. Once the foals are old enough to travel, the mares usually leave the protection of the stallion's territory to continue their nomadic lifestyle.

Zebras communicate with one another with facial expressions and sounds. They make loud braying or barking sounds and soft snorts and whuffs. The position of their ears, how wide open their eyes are, and whether their mouths are open or their teeth are bared all mean something. Ears flat back, for example, means trouble, or you better follow orders! Zebras also reinforce their bonds by grooming each other. You might see two zebras standing head to back, apparently biting each other, but they are really only nibbling on each other with their teeth to pull out loose hair and get a good scratch.

# Run, baby, run!

Like domestic horses, zebras put a good deal of energy into raising their offspring. Zebra foals have soft, fuzzy fur, and their stripes are usually brown and white at first. Their legs are already

almost as long as an adult zebra's and they can walk just 20 minutes after birth and can run after an hour! This is important, since the mare needs to move with the herd to find food and water. She cannot leave the foal behind, so it must be up and running quickly in order to stay with the family.

Foals must be able to recognize their mother from birth in order to survive. A foal learns its mother's stripe pattern in order to follow her. Mares usually do not adopt other foals, so there would be no chance of getting food from anyone but Mom. Mothers often separate from the herd a short distance so that their foals can imprint on them. Once the foal can readily identify its mother, the mare and her foal return to the herd for protection.

## http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-gzebra.cfm

## **GREVY'S ZEBRA**

Order: Perissodactyla

Family: Equidae

Genus and Species: Equus grevyi

In its habits and geographic distribution, the Grevy's zebra occupies a middle ground between asses and other zebras.

PHYSICAL DESCRIPTION

Big heads, large and rounded ears, and thick, erect manes make the Grevy's zebra appear more mule-like than other zebras. In fact, many experts consider Grevy's zebras to be striped asses that are not closely related to other zebras. Their coats sport dazzling narrow stripes that wrap around each other in a concentric pattern and are bisected by a black stripe running down the spine.

SIZE

Grevy's zebras grow up to nine feet long, weigh up to 990 pounds, and stand up to almost five and a half feet at the shoulder. On average, males are about ten percent larger than females. GEOGRAPHIC DISTRIBUTION

Grevy's zebras live in northern Kenya and southern and eastern Ethiopia.

STATUS

Grevy's zebra is listed as endangered on the World Conservation Union's (IUCN's) Red List of Threatened Animals.

Grevy's Zebras in the Snow

HABITAT

Grevy's zebras inhabit semi-desert areas, including arid grasslands and dusty acacia savannas. The most suitable areas have water year-round.

NATURAL DIET

Grevy's zebras graze primarily on tough grasses, but they also browse on leaves, which may constitute up to 30 percent of their diet.

REPRODUCTION

Grevy's zebras usually mate in August, September, and October, and bear foals during the rainy seasons. After mating, females give birth to a single foal 13 months later. Foals nurse heavily for half a year and may travel with their mothers for three years. Groups of females with young form herds of up to 200 animals.

LIFE SPAN

In zoos, Grevy's zebras may live to about 20 years old; longevity in the wild is likely shorter. BEHAVIOR

Males are highly territorial, claiming prime watering and grazing areas with piles of dung called middens. They generally live alone in their territories, except when females move through during mating season. Non-territorial males travel together in groups of two to six animals. This social system differs from that of other zebras, which typically form female harems that live in one male's territory all year. During dry months, many Grevy's zebras migrate to greener mountain pastures, but males on prime territories often remain there year-round.

PAST/PRESENT/FUTURE

Fossils reveal that Grevy's zebras ranged at least to Egypt (and perhaps beyond Africa) until about 6,000 years ago. In historic times, Grevy's zebras were found in parts of Ethiopia, Kenya, and Somalia. Due to hunting for their skins and for food, they no longer live in Somalia, and their range in Ethiopia and Kenya is reduced. The total wild population is probably fewer than 6,000 animals. Competition with domestic grazing animals, habitat destruction, and human disturbance at critical water holes contribute to their decline. Also, poorly regulated ecotourism —especially when vehicles leave roads and disturb the animals—may affect breeding in some parks. Better protection and linkages between important park areas are essential for Grevy's zebras' survival.

# FUN FACTS

The Grevy's zebra is the largest wild member of the horse family.

Each zebra has its own unique set of stripes, which are as distinctive as fingerprints.

A denizen of extremely dry places, Grevy's zebras were once widespread in Africa and perhaps outside the continent. Some scientists think plains zebras (Equus burchelli) took their place after less arid savannas replaced more arid ones in many areas.

A FEW GREVY'S ZEBRA NEIGHBORS

Cheetah (Acinonyx jubatus): The world's fastest and most specialized cat shares some of the Grevy's zebra's strongholds.

Beisa oryx (Oryx gazella beisa): A large, long-horned antelope with black stripes on its flanks and face.

Vulturine guineafowl (Acryllium vulturinum): A bare-headed gamebird with dazzling black, blue, and white plumes.

By saving Grevy's zebra habitat, we protect these and many other animals.

## WILDEBEEST

#### http://animals.nationalgeographic.com/animals/mammals/wildebeest/

The ungainly gnu earned the Afrikaans name wildebeest, or "wild beast," for the menacing appearance presented by its large head, shaggy mane, pointed beard, and sharp, curved horns. In fact, the wildebeest is better described as a reliable source of food for the truly menacing predators of the African savanna: lions, cheetahs, wild dogs, and hyenas.

The gnu (pronounced "g-new" or simply "new") is a member of the antelope family, although its heavy build and disproportionately large forequarters make it look more bovine. Gnus can reach 8 feet (2.4 meters) in length, stand 4.5 feet (1.4 meters) tall at the shoulders and weigh up to 600 pounds (272 kilograms). Both males and females grow horns.

Their habitat comprises the grassy plains and open woodlands of central, southern, and eastern Africa, particularly the Serengeti in Tanzania and Kenya. They travel in large herds and are active day and night, grazing constantly.

Their spectacular northward migration in search of greener pastures is dictated by weather patterns, but usually takes place in May or June. It is considered one of the greatest wildlife spectacles on Earth, involving up to 1.5 million wildebeests as well as hundreds of thousands of other animals, including zebra and gazelle.

Up to 500,000 calves are born in February and March each year, at the beginning of the rainy season. Calves learn to walk within minutes of birth and within days are able to keep up with the herd. Gnus can live to be 20 years old.

Fast Facts

Type: Mammal Diet: Herbivore Average life span in the wild: 20 years Size: Up to 4.5 ft (1.4 m) Weight: 330 to 550 lbs (150 to 250 kg ) Group name: Herd

## http://www.outtoafrica.nl/animals/engwildebeest.html

Wildebeest FACT FILE: Swahili Name: Nyumbu Ya Montu Scientific Name: Connochaetes taurinus Size: 50 to 58 inches at the shoulder Weight: 265 to 600 pounds Lifespan: 20 years Habitat: Open woodland and open grassy plains Diet: Grazers Gestation: 8 to 81/2 months Predators: Lions, cheetahs, hunting dogs, hyenas

There is no other antelope like the wildebeest. It looks like it was assembled from spare parts – the forequarters could have come from and ox, the hindquarters from an antelope and the mane and tail from a horse. The antics of the territorial bulls during breeding season have earned them the name "clowns of the savanna."

The species that forms the large herds of the Serengetis-Mara ecosystem of Tanzania and Kenya is variously known as the brindled, blue- or white-bearded gnu. Scientists do, however, make a distinction and list the blue as a separate race restricted to southern Tanzania. The wildebeest described here is the white-bearded of southern Kenya and northern Tanzania.

#### **Physical Characteristics**

The head of the wildebeest is large and box-like. Both males and females have curving horns, that are close together at the base, but curve outward, inward and slightly backward. The body looks disproportionate, as the front end is heavily built, the hindquarters slender and the legs spindly.

The wildebeest is gray with darker vertical stripes that look almost black from a distance. This species has a dark name and a long tail. Newborns are a yellowish-brown, but change to adult color at about 2 months.

## Habitat

Large herds of wildebeest are located in the plains and acacia of eastern Africa.

#### Behavior

In the Serengeti-Mara ecosystem the animals make a migratory circle each year of 500 to 1,000 miles. The migration starts after the calving season in January and February on the short grass plains in the southeastern Serengeti. Wildebeests move west toward Lake Victoria, across the grass savanna to the open woodlands, then turn north into the Mara. They then begin the return trip to the south. They are relentless in their advance and will swim rivers and lakes in such huge masses that many are injured, lost (especially in the case of calves) or killed.

Wildebeest are continually on the move as they seek favorable supplied of grass and water. Active both day and night, they often string out in long single columns when on the move. They also cover long distances at a slow rocking gallop but can run fast when necessary. Zebras and Thomson's gazelles, and some of their many predators, accompany the migrating wildebeests.

During mating season smaller breeding groups of about 150 animals form within the massive herds. In these small groups, five or six of the most active bulls establish and defend territories that females wander through. The bulls go through all kinds of antics, galloping and bucking around their territories. They paw the ground and rub their heads on it, spreading secretions produced by the preorbital and interdigital glands. They also urinate and defecate in a certain spot and toll in it to signal to other bulls to stay away.

When neighboring bulls meet at the edges of their territories they go through a highly ritualized "challenge" in which they paw the ground, buck, snort and fight. They typical combat position in on their knees, facing one another, with their foreheads flat on the ground – they knock heads and hit at the base of the horns but seldom injure one another. Some scientists believe these

challenges may increase hormone levels, as the nonterritorial bulls in the bachelor herds are very placid.

#### Diet

Strictly grazers, wildebeest prefer short grass. They are unable to go without water for more than a few days.

#### Caring for the Young

Wildebeest females give birth to a single calf in the middle of the herd, not seeking a secluded place, as do many antelopes. Amazingly, about 80 percent of the females calve within the same 2- to 3- week period, creating a glut for predators and thus enabling more calves to survive the crucial first few weeks. A calf can stand and run within minutes of birth. It immediately begins to follow its mother and stays close to her to avoid getting lost or killed by waiting predators. Within days, it can run fast enough to keep up with the adult herd.

A calf eats its first grass at about 10 days, although it is still suckled for at least 4 months. Even after weaning, it will remain with the mother until the next year's calf is born. At that time the young males are driven away, but the females often remain in the same groups as their mothers.

#### Predators

Wildebeest are the preferred prey of lions and spotted hyena. Although the animals have no camouflage coloring, they get some protection from gathering in large herds. (If a calf loses its mother it will imprint on and follow whatever is closest – a car, a person or occasionally even a predator, but in the later case, probably not for long.)

#### Did you know?

The wildebeest is one of the few African antelopes to have extended its range in the last 50 years. They numbered about 250,000 in 1960 and are thought to number 1.5 million today. Wildebeest, or gnus, (pronounced 'news'), are noisy. They constantly emit low moans and if disturbed, snort explosively.

## http://www.bioexpedition.com/wildebeest/

Class Mammalia Order Artiodactyla Family Bovidae Subfamily Alcelaphinae Genus Connochaetes Conservation status Least Concern

#### Introduction to Wildebeest

The Wildebeest belongs to the animals known as antelope. They are very fast, agile, and powerful. They can be between 4 and 5 feet tall and weigh as much as 600 pounds. The males weigh more than the females. There are two species – blue and black. The differences have to do with the horn curving and the color of their fur.

Wildebeest Description

The body of this animal is very large and stocky. They have powerful hooves that are designed to allow them to go over rugged terrain. They also prevent the animal from slipping or sliding in the mud. They are a dark black with stripes. They have horns that are curved to help them have protection from enemies. The back end of the body closely resembles that of an ox. Wildebeest Distribution

Along the plains and open woodlands of Africa are where you will find the Wildebeest. Today many of them are protected along the Serengeti National Park. Tanzania and Kenya also have populations of them. They have migration periods that they follow for food and for water. The drought can determine when they will head along those migrational routes. These routes are often from 500 to 1,000 miles. The journey can be very long and difficult for the young and for those that are injured or older. The herd can't slow down to wait for those that can't keep up.

#### Wildebeest Behavior

The Wildebeest are very vulnerable to various big cats and other predators in the wild. That is why they live in large herds. Typically, it is the young and the sick that are more vulnerable. They also stay close to Zebras and it is believed that it also helps to offer them more protection. The Zebras can be prey that the predators will get instead of a Wildebeest. They also share alarm calls when there could be a predator out there.

These animals have lookouts that help to protect the herds. They will make noise and run when there is a risk, and that encourages all of them to run. Most predators won't go after a healthy Wildebeest as a kick from one of them could severely injure or kill that predator. The herds of Wildebeest can be from 150 to many thousands of them. It depends on the location and the availability of food. They form many sub units within their larger herds. They may divide up if they are having trouble finding enough food. By branching off in smaller herds they increase the overall chances of survival.

#### Wildebeest Feeding

Grass, shrubs, herbs, and plants are the diet of the Wildebeest. They don't stay in one place to eat. Instead, they graze around a very large migrational route. They will move along based on food availability, water or drought production, and even predators that may be in a given location. Their survival depends on food so they will do all they can to find it.

#### Wildebeest Reproduction

The rainy season is the time of year when mating will occur for the Wildebeest. The males may become very aggressive with each other to be able to mate with females. The males will be very entertaining for the females they wish to mate with. In fact, they are nicknamed the clowns of the savanna for this reason.

The mother will give birth to the young about 8 to 9 months later. All of the young in a herd are born within a 3 week window. Even though the mothers are great caregivers there is a high mortality rate. They young have to stay very close to their mothers if they are going to be considered to risky for predators to approach.

# Vervet Monkey

## http://a-z-animals.com/animals/vervet-monkey/Vervet Monkey Classification and

## Evolution

The Vervet Monkey is a medium to large sized monkey that is primarily found in Eastern Africa. The Vervet Monkey is thought to be a species of Grivet, another tree-dwelling African monkey that has very similar characteristics to the Vervet, along with the Malbrouck which is considered by some to be a sub-species of Vervet Monkey. These three animals are very closely related but they tend to inhabit territories in slightly different locations and are thought to rarely come into contact with one another. There are currently six recognised sub-species of the Vervet Monkey that are generally classified depending on their location, although there is some difference in colouration between them.

## Vervet Monkey Anatomy and Appearance

The Vervet Monkey grows to an average of 50cm tall, with a tail that is often longer than the body itself and has a black tip. Their fur tends to be grey or olive in colour (depending on the species) and is lighter on their underside. The hands and feet of the Vervet Monkey are black, along with their ears and face which has a white band above it and is also framed by white cheek tufts. The Vervet Monkey has long arms and legs which are about the same length to allow this species to walk on all fours when on the ground with ease, and actually makes them quite speedy when running. Males tend to be larger than females and are easily distinguished by their bright blue testicles.

## Vervet Monkey Distribution and Habitat

The Vervet Monkey is found south of the Sahara and is widespread across Eastern Africa. They are also found in parts of southern and western Africa from Uganda to Ghana but their location is generally dependant on the sub-species. The Vervet Monkey inhabits savanna, woodland and forests that tend to be close to water, preferring acacia forests that line rivers and lakes. Vervet Monkeys can also be found in mountainous regions up to 1,300 feet providing that there is an adequate supply of both food and water to sustain the population. They are rarely found in more extreme environments such as deserts and rainforests as these regions simply do not have everything that Vervet Monkeys require to successfully survive.

## Vervet Monkey Behaviour and Lifestyle

The Vervet Monkey is an arboreal monkey which means that it spends most of it's time in the safety of the trees. Although they do venture down to the ground in search of both food and water, Vervet Monkeys rarely go further than 450 meters from the trees, which helps to protect them from predators. They are diurnal animals spending the days foraging for food and then rest at night. The Vervet Monkey is a very sociable animal inhabiting territories in troops that can contain between 10 and 50 individuals, depending on the location and how ample the food supply is. These troops are comprised of adult females and their young, with males wandering between different troops to both socialise and mate.

# Vervet Monkey Reproduction and Life Cycles

The Vervet Monkey is not usually able to reproduce until they are about five years old, although their age of sexual maturity is known to vary slightly and may be dependent on how much food they have access too. After about 5 and a half months, females give birth to a single infant which is cleaned by it's mother at birth, and clings to her stomach during the first week or so. Vervet Monkey babies quickly develop strong social bonds with other monkeys and are known to begin interacting and playing with them by the time they are a month old. They have pink faces and black fur and don't tend to develop their adult colouration until they are a few months old. Vervet Monkey offspring suckle on their mother's milk until they are nearly four months old and start to eat softer vegetation, but they are not fully weaned until they are about a year old.

# Vervet Monkey Diet and Prey

The Vervet Monkey is an omnivorous animal, meaning that they consume both plant matter and other animals in order to get the nutrition that they need to survive. Leaves and young shoots make up the bulk of the Vervet Monkey's diet, along with tree bark, flowers and fruits that can also be found in the trees surrounding them. On the ground Vervet Monkey's forage for roots, bulbs, seeds and grasses and are also known to supplement their diet with insects, eggs, rodents, birds and other small animals. Like many other monkey species, the Vervet uses it's incredibly dexterous hands in order to collect food, with it's long tail aiding in balancing on the tree branches.

# Vervet Monkey Predators and Threats

The Vervet Monkey has few predators whilst it remains in the safety of the trees with larger species of Eagle being their most common threat. On the ground however, they are preyed upon by a number of Africa's large predators including felines like the Leopard, Serval and Caracal, along with large reptiles such as Pythons, and Crocodiles close to water. Never venturing too far from the trees means that the Vervet Monkey can quickly make it back up into safety, and it's ability to run at speed allows them to try and escape more quickly. Although Vervet Monkeys generally only make chattering sounds, they are known to scream and whistle to alert other members of the troop that they are in danger.

# Vervet Monkey Interesting Facts and Features

Despite the fact that the Vervet Monkey tends to reach sexual maturity after a number of years in the wild, sexual maturity in captivity tends to occur much sooner at an average age of two years old. They are incredibly well adapted to their surrounding environments as they can jump and climb well when in the trees and are pretty speedy on the ground, along with being excellent swimmers. Younger females in the troop that are not yet mature, often show a keen interest in the offspring of adult females and assist them with grooming and caring for their young. They are also known to love to hold them, making it not wonder that social bonds within the troop particularly between relatives, often last for life.

# Vervet Monkey Relationship with Humans

The Vervet Monkey has adapted well to the growing urban environments that have replaced it's historical habitat, but they are sometimes seen as pests in these areas. Vervet Monkeys are known to raid fields of crops, along with stealing food and other items that they find and are rarely caught by Humans due to their speed and agility, both on the ground and in the trees. Although they have been affected by growing Human settlements, it is also the destruction of their natural ranges mainly for agriculture, that is affecting the Vervet Monkey populations. They have also been introduced onto two of the West Indian Islands, which are the islands of St. Kitts and Barbados.

# Vervet Monkey Conservation Status and Life Today

Today, the Vervet Monkey has been listed as a species that is of Least Concern of becoming extinct in it's natural environment in the immediate future, as the species is widespread and is found in a variety of different habitats. Although they have also adapted well to city-life, they are

Vervet

often killed by electricity pylons and traffic along with being used in traditional medicines, and caught as bushmeat.

#### https://www.awf.org/wildlife-conservation/vervet-monkey

Scientific name: Cercopithecus aethiops Weight: 7 to 17 lb. Size: 18 to 26 in. Life span: Up to 24 years in captivity Habitat: Woodland, savanna, high bush Diet: Omnivorous Gestation: 5.5 months Predators: Leopards, eagles

#### Where do vervet monkeys live?

In East Africa, vervet monkeys can live in mountain areas up to about 13,000 feet, but they do not inhabit rain forests or deserts. Their preferred habitat is acacia woodland along streams, rivers, and lakes.

## What is a vervet monkey?

The vervet is a small, black-faced monkey, common to East Africa. There are several subspecies of vervet monkeys, but, generally, the body is a greenish-olive or silvery-gray. The face, ears, hands, feet, and tip of the tail are black, but a conspicuous white band on the forehead blends in with the short whiskers. The males are slightly larger than the females and easily recognized by a turquoise-blue scrotum and red penis. The vervet is classified as a medium- to large-sized monkey. Its tail is usually held up, with the tip curving downward, and its arms and legs are approximately equal lengths.

## Vervet monkeys enjoy a mostly vegetarian diet.

Leaves and young shoots are most important in the vervet diet, but bark, flowers, fruit, bulbs, roots, and grass seeds are also consumed. Their mainly vegetarian diet is supplemented with insects, grubs, eggs, baby birds, and sometimes rodents and hares. Vervets rarely drink water.

## They adhere to a strict hierarchy.

Vervet society is built on complex but stable social groups (called troops) of 10 to 50 individuals —mainly adult females and their immature offspring. There is a strict social hierarchy among troop members. Males transfer troops at least once in their lifetime, beginning at puberty. This is a dangerous process, not only because of the predators they may encounter in transit, but also because troops dislike immigrants.

The hierarchical system controls feeding, mating, fighting, friendships, survival, and even grooming—an important part of the vervet's life. They spend several hours each day removing parasites, dirt, and other materials from one another's fur. In the hierarchy, dominant individuals receive the most grooming.

#### Infants are cherished in vervet society.

The newborn has black hair and a pink face, and it takes three or four months before it acquires adult coloration. The infant spends the first week of life clinging to its mother's stomach. After

about the third week, it begins to move about by itself and attempts to play with other young monkeys. Infants are of great interest to the other monkeys in the troop; subadult females do everything possible to be allowed to groom or hold a new infant. Researchers report that usually a female's close family members will have the most unrestricted access to the babies. As the infants grow, they play not only with monkeys, but also with other young animals.

## CHEETAHS

#### http://animals.nationalgeographic.com/animals/mammals/cheetah/

The cheetah is the world's fastest land mammal. With acceleration that would leave most automobiles in the dust, a cheetah can go from 0 to 60 miles (96 kilometers) an hour in only three seconds. These big cats are quite nimble at high speed and can make quick and sudden turns in pursuit of prey.

Before unleashing their speed, cheetahs use exceptionally keen eyesight to scan their grassland environment for signs of prey—especially antelope and hares. This big cat is a daylight hunter that benefits from stealthy movement and a distinctive **spotted coat that allows it to blend easily into high, dry** grasses.

When the moment is right a cheetah will sprint after its quarry and attempt to knock it down. Such chases cost the hunter a tremendous amount of energy and are usually over in less than a minute. If successful, the cheetah will often drag its kill to a shady hiding place to protect it from opportunistic animals that sometimes steal a kill before the cheetah can eat. Cheetahs need only drink once every three to four days.

Female cheetahs typically have a litter of three cubs and live with them for one and a half to two years. Young cubs spend their first year learning from their mother and practicing hunting techniques with playful games. Male cheetahs live alone or in small groups, often with their littermates.

Most wild cheetahs are found in eastern and southwestern Africa. Perhaps only 7,000 to 10,000 of these big cats remain, and those are under pressure as the wide-open grasslands they favor are disappearing at the hands of human settlers.

## http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-cheetah.cfm

CHEETAH Order: Carnivora Family: Felidae Genus and Species: Acinonyx jubatus THE WORLD'S FASTEST LAND MAMMAL IS VULNERABLE TO EXTINCTION THROUGHOUT ITS RANGE

#### PHYSICAL DESCRIPTION

Built more like greyhounds than typical cats, cheetahs are adapted for brief but intense bursts of speed. They have wiry bodies and small heads. Their coats are golden or yellowish, embellished with many small black spots, and their tails are long with a few black bands and sometimes a white tip. Black stripes run from their eyes down to the corners of their mouths. SIZE

Cheetahs grow to between three and a half and four and a half feet long, not including their 30inch tails. They weigh between 75 and 145 pounds and stand two to three feet tall at the shoulder. Males tend to be a bit more robust and weigh about ten pounds more than females.

# GEOGRAPHIC DISTRIBUTION

Cheetahs live in small, isolated populations mostly in sub-Saharan Africa. They are very rare in southern Algeria and northern Niger, and range from Senegal east to Somalia and south to northern South Africa. A few have been reported from Iran. However, many of their strongholds are in eastern and southern African parks.

# STATUS

The cheetah is listed as vulnerable on the World Conservation Union's (IUCN's) Red List of Threatened Animals.

# HABITAT

Savannas, both open and more densely vegetated, give cheetahs the open areas they need for quick stalks and chases. They are not found in forest areas or wetlands.

# NATURAL DIET

Cheetahs eat primarily hoofed mammals weighing less than 90 pounds, including gazelles and young wildebeest. They will also eat smaller game such as hares, warthogs, and birds. NATIONAL ZOO DIET

The Zoo's cheetahs eat ground horse meat and sometimes beef, rabbits, and chicks. REPRODUCTION

Females reach breeding age by 21 or 22 months of age. Males live in small permanent groups called coalitions, which are usually made up of brothers. Males are drawn to females in heat, but only one male in a coalition usually mates with the selected female. On average, three cubs are born about three months after mating takes place. Until five or six weeks old, the cubs remain hidden; if she needs to move, the mother carries them from place to place. After five or six weeks, cubs follow their mothers and share her kills. Cheetah cubs wean at about three months old.

# LIFE SPAN

In zoos, cheetahs may live up to 17 years, though the average is 8 to 12. No one has studied cheetah longevity in the wild, though cub mortality is very high and about 90 percent die before they are 3 months old.

# BEHAVIOR

Female cheetahs live alone, except when raising cubs. They rarely associate with other cheetahs, except when ready to mate. Males live in small permanent groups called coalitions, which are usually made up of two to four brothers. To avoid lions and leopards, cheetahs usually hunt in the middle of the day. Cheetahs stalk their prey, approaching to within about 50 feet before dashing out from cover and sprinting at the targeted animals. Cheetahs grab their victims' throats and suffocate their quarry within a few minutes. After securing their meal, they may drag it to nearby cover. Despite their best efforts to hide their catches, their kills are often stolen by larger predators and picked at by hordes of vultures. Lions and hyenas also eat cheetah cubs; lions and leopards also kill adults.

# PAST/PRESENT/FUTURE

Once widespread across arid Africa, into the Middle East and east to India, the cheetah has suffered dramatic declines over the last century. It now lives in Africa, and a few may survive in Iran. Hunted for their spotted coats and because they sometimes attack livestock, they disappeared from many areas. More recently, widespread habitat destruction has fragmented cheetah habitats, isolating many populations. In many areas, the cheetah's prey has been overhunted by people. Scientists have also found that many cheetahs suffer from genetic defects due to inbreeding, possibly the result of a population bottleneck—a sharp decline—that occurred perhaps as far back as 10,000 years ago. Among other things, inbreeding could raise cub mortality, lower cheetahs tresistance to disease, and cause infertility. An estimated 8,000 to 10,000 wild cheetahs survive. Cheetah strongholds, where possible, must be connected to allow

genetic interchange if this species is to survive. Also, conflict between cheetahs and humans needs to be moderated. For example, in Namibia, ranchers may legally shoot cheetahs that prey on livestock.

FUN FACTS

A sprinting cheetah can reach 45 miles per hour within 2.5 seconds. Top speed—up to 64 miles per hour—can only be briefly sustained.

In the 16th century, emperors and other royalty hunted gazelles with trained cheetahs. A FEW CHEETAH NEIGHBORS

Thomson's gazelle (Gazella thomsonii): Within its range, this smallish, striped animal is a favored prey of the cheetah.

Beisa oryx (Oryx gazella beisa): A large, long-horned antelope with black stripes on its flanks and face.

Vulturine guineafowl (Acryllium vulturinum): A bare-headed gamebird with dazzling black, blue, and white plumes.

By saving cheetah habitat, we protect these and many other animals.

#### https://www.awf.org/wildlife-conservation/cheetah

QUICK FACTS Scientific name: Acinonyx jubatus

Weight: 110 to 140 lb.

Size: 30 in. at the shoulder

Life span: 10 to 20 years

Habitat: Open plains

Diet: Carnivorous

Gestation: 90 to 95 days

Predators: Eagles, humans, hyenas, lions

#### Where do cheetahs live?

The cheetah's habitat has been reduced by 76%, and they occur widely but sparsely in the regions they still inhabit. Southern and Eastern Africa are strongholds for cheetah populations.

#### What do cheetahs look like?

Cheetahs have long, slim, muscular legs; a small, rounded head set on a long neck; a flexible spine; a deep chest; special pads on its feet for traction; and a long tail for balance. It is also the only cat that cannot retract its claws, an adaptation to help maintain traction like a soccer player's cleats. It also bears distinctive black "tear tracks" running from the inside corner of each eye to the mouth, which may serve as an anti-glare mechanism for daytime hunting.

The cheetah is a fast but timid predator.

Cheetahs usually prey on small antelopes such as Thomson's gazelles and impalas, but they also hunt small mammals and birds. The cheetah gets as close to the prey as possible, then in

a burst of speed, it tries to outrun its quarry. Once the cheetah closes in, it knocks the prey to the ground with its paw and suffocates the animal with a bite to the neck. Once a cheetah has made a kill, it eats quickly and keeps an eye out for scavengers—lions, leopards, hyenas, vultures, and jackals will steal from this timid predator.

# Cheetahs are a little introverted.

The cheetah is basically a solitary animal. At times, a male will accompany a female for a short while after mating, but most often, the female is alone or with her cubs. Cheetah mothers spend a long time teaching their young how to hunt. Small, live antelopes are brought back to the cubs so they can learn to chase and catch them.

#### http://cheetah.org/about-the-cheetah/for-kids/

Cheetah Speed :The cheetah is the world's fastest land animal. They can run 70 mph (or 110 kph), which is as fast as cars drive on the highway. The cheetah can reach its top speed in just 3 seconds!

Tail like a rudder: The cheetah has a long, muscular tail that has a flat shape. The tail almost functions like a rudder on a boat because they use it to help control their steering and keep their balance when running very fast.

Special cleat feet: The cheetah has "semi non-retractable" claws (almost like dog claws) that work like the cleats on a football shoe to give the cheetah a lot of traction when running. The pads of most cats' paws are soft, but the cheetah's pads are hard kind of like the rubber on a tire. This also helps them grip the ground when they are running so fast.

Like football players: Cheetahs have "tear marks" that run from the inside corners of their eyes down to the outside edges of their mouth. These marks help reflect the glare of the sun when they are hunting during the day. They work just like the black marks that football players put under their eyes during the games. These marks also work like the sights on a rifle, to help the cheetah "aim" and stay focused on their prey when they are hunting.

Spotted Skin: The cheetah's fur is covered in solid black spots, and so is their skin! The black fur actually grows out of the black spots on their skin.

Almost like flying: When cheetahs are running full speed, their stride (length between steps) is 6-7 meters (21 feet). Their feet only touch the ground twice during each stride.

A cheetah's favorite food: Cheetahs are carnivores, and feed mostly on smaller antelope like springbok, steenbok, Thomson's gazelle, and duiker. They usually chase down their prey and then bite its throat, killing it by cutting off its air supply (suffocation).

Not just a funny haircut: Cheetah cubs have long tall hair that runs from their neck all the way down to the base of their tail, which is called the mantle. The mantle makes a cheetah cub look like a honey badger and makes them blend into tall grass, which helps keep them safe from threats like lions and hyenas.

A lot of kids: A mother cheetah usually cares for anywhere from 2 to 8 cubs per litter, but cubs are often the target of other predators and many do not survive past the first year.

Most endangered cat: There are only 10,000 cheetahs left in the wild, making the cheetah Africa's most endangered big cat.

# LION http://kids.nationalgeographic.com/animals/lion/

# OVERVIEW

For all of their roaring, growling, and ferociousness, lions are family animals and truly social in their own communities. They usually live in groups of 15 or more animals called prides. Prides can be as small as 3 or as big as 40 animals. In a pride, lions hunt prey, raise cubs, and defend their territory together. In prides the females do most of the hunting and cub rearing. Usually all the lionesses in the pride are related—mothers, daughters, grandmothers, and sisters. Many of the females in the pride give birth at about the same time. A cub may nurse from other females as well as its mother. Each pride generally will have no more than two adult males.

While the females usually live with the pride for life, the males often stay for only two to four years. After that they go off on their own or are evicted by other males who take over the pride. When a new male becomes part of the pride it is not unusual for him to kill all the cubs, ensuring that all future cubs will have his genes. The main job of males in the pride is defending the pride's territory. A male's loud roar, usually heard after sunset, can carry for as far as five miles (eight kilometers). The roar warns off intruders and helps round up stray members of the pride.

Hunting generally is done in the dark by the lionesses. They often hunt in groups of two or three, using teamwork to stalk, surround, and kill their prey. Lionesses aren't the most successful of hunters, because they usually score only one kill out of several tries. After the kill the males usually eat first, lionesses next—and the cubs get what's left. Males and females fiercely defend against any outside lions that attempt to join their pride.

# http://animals.nationalgeographic.com/animals/mammals/african-lion/?source=A-to-Z

Lions are the only cats that live in groups, which are called prides. Prides are family units that may include up to three males, a dozen or so females, and their young. All of a pride's lionesses are related, and female cubs typically stay with the group as they age. Young males eventually leave and establish their own prides by taking over a group headed by another male.

Only male lions boast manes, the impressive fringe of long hair that encircles their heads. Males defend the pride's territory, which may include some 100 square miles (259 square kilometers) of grasslands, scrub, or open woodlands. These intimidating animals mark the area with urine, roar menacingly to warn intruders, and chase off animals that encroach on their turf.

Female lions are the pride's primary hunters. They often work together to prey upon antelopes, zebras, wildebeest, and other large animals of the open grasslands. Many of these animals are faster than lions, so teamwork pays off.

After the hunt, the group effort often degenerates to squabbling over the sharing of the kill, with cubs at the bottom of the pecking order. Young lions do not help to hunt until they are about a year old. Lions will hunt alone if the opportunity presents itself, and they also steal kills from hyenas or wild dogs.

Lions have been celebrated throughout history for their courage and strength. They once roamed most of Africa and parts of Asia and Europe. Today they are found only in parts of sub-Saharan Africa, except for one very small population of Asian lions that survives in India's Gir Forest.

# http://nationalzoo.si.edu/animals/greatcats/lionfacts.cfm

LION FACTS Smithsonian's National Zoo's Lion Cubs Are Growing! Female lions lack manes. Class: Mammalia Order: Carnivora Family: Felidae Species: Panthera leo

The world's most social felines, lions usually get by with a little help from their pride mates. PHYSICAL DESCRIPTION:

Lions have strong, compact bodies and powerful forelegs, teeth, and jaws for pulling down and killing prey. Their coats are yellow-gold. Adult males have shaggy manes that range in color from blond to reddish-brown to black, and length. The length and color of the mane is believed to be determined by such factors as age, genetics, and hormones. Young lions have light spotting on their coats that will disappear as they grow up. SIZE:

Male lions grow larger than females, reaching up to ten feet long (females reach up to nine feet long), plus a two- to three-foot-long tail. Male lions weigh from 330 to 550 pounds; females weigh 265 to 395 pounds. Lions stand between three and a half and four feet tall at the shoulder.

**GEOGRAPHIC DISTRIBUTION:** 

Except for a small population that hangs on in the dry Gir Forest of northwest India, lions now live only in Africa. They are found from the Sahara's southern fringe to northern South Africa, but are absent from equatorial areas dominated by moist tropical forest. STATUS:

The lion is listed as vulnerable on the World Conservation Union's (IUCN's) Red List of Threatened Animals. The Gir Forest population, which consists of about 300 lions, is listed as endangered.

Habitat:

Lions inhabit a wide range of habitats, from open plains to thick brush and dry thorn forest. NATURAL DIET:

Lions eat primarily large animals, such as zebra and wildebeest, weighing from 100 to 1,000 pounds. In times of shortage, they also catch and eat a variety of smaller animals from rodents to reptiles. Lions steal kills from hyenas, leopards, and other predators, but may also lose their catches to hyena groups. Lions may also feed on domestic livestock, especially in areas near villages.

NATIONAL ZOO DIET:

Keepers feed the Zoo's lions beef. Twice a week the lions received bones (usually a beef hind shank, half femur, or knuckle).

REPRODUCTION:

Female lions usually give birth to a litter every two years. Females are receptive to mates for a few days several times a year, unless they are pregnant or nursing. Mating spurs ovulation. Females give birth to one to six cubs after a gestation of about three and a half months. Cubs nurse for six months, but start eating meat at three months. Due to varied dangers, including starvation during times of food shortage and attacks by male lions taking over prides, 60 to 70 percent of lion cubs die within their first two years of life.

LIFE SPAN:

Zoo lions typically live into their late teens or early 20s. Male lions in the wild live about 12 years; females live about 15 years.

# **BEHAVIOR**:

Lions live in groups of related females called prides, which may comprise several to as many as 40 individuals, including adults, sub-adults (two to four years old) and cubs, plus one or more resident males. Abundance of prey availability plays a significant role in the size of a lion pride. Pride mates associate in sub-groups within the pride.

Females stay in their mothers' prides for life, unless food scarcity forces them out. Young males are driven from their prides when they grow large enough to compete with the dominant males. Young males join in coalitions, usually with brothers and cousins, and search for a pride to take over. Males entering a new pride will kill all cubs that cannot run from them. Adult males that are fortunate enough achieve residency within a pride hold tenure for an average of two years, often leaving due to eviction by another coalition of males. In India, female and male lions live apart, joining only to mate.

Males take on most of defense duties, however, both males and females will mark their territories by roaring and scent marking (urine). Females raise the cubs and are the primary hunters, although males will sometimes join the females during a hunt. Nomadic males must hunt alone or scavenge from other animals. During a hunt several lions stalk prey from different angles to within 100 feet before attacking the targeted animal.

# PAST/PRESENT/FUTURE:

More than 10,000 years ago, lions thrived from North and South America to Europe, Africa, and Asia. Today, following climatic changes and after centuries of hunting and habitat degradation by people, lions live in scattered habitats across Africa (with the exception of the Gir Forest lions, which live in a park in northwest India). Within these areas, lions still face dangers, including habitat loss and hunting. Many have died from diseases such as distemper, which is spread by domestic dogs from villages near natural habitat.

To keep lions from becoming as rare as tigers, large expanses of suitable habitat with sufficient prey must be carefully protected. In disease-ridden areas, free-ranging domestic dogs must be kept away from lions or immunized. Meanwhile, the isolated Gir Forest lions have a limited amount of habitat, and frequent conflicts with people. For this population to grow, some of its lions must be moved to other reserves or the Gir Forest protected area must be expanded. At the same time, continuous conflicts between lions and people who live near them must be mitigated.

# A FEW LION NEIGHBORS:

spotted hyena (Crocuta crocuta): Africa's second largest carnivore (after lions) is also one of the lion's greatest competitors for prey.

wildebeest (Connochaetes taurinus): Also called a gnu, this strange-looking, migratory animal is the most abundant antelope on East and southern African plains. It is an important food for lions.

plains zebra (Equus burchellii): Another important prey species of lions, zebras wander widely across the East and southern African plains.

chital (Axis axis): Also called spotted deer, these Asian deer are important prey for India's lions.

By saving lion habitat, we protect these and many other animals. FUN FACTS: Tigers are lions' closest relatives. Without their coats, lion and tiger bodies are so similar that only experts can tell them apart. A lion's roar can be heard up to five miles away. A male coalition rarely holds onto a pride longer than two to three years before being run off by fierce challengers

# http://animals.sandiegozoo.org/animals/lion

# Mammals | LION

ABOUT FUN FACTS AT THE ZOO CONSERVATION Range: Africa and Asia Habitat: Grassy plains, savannas, open woodlands, and scrubland King of the jungle, forest, and savanna

Lions have captured our imagination for centuries. Stars of movies and characters in books, lions are at the top of the food chain. The Swahili word for lion, simba, also means "king," "strong," and "aggressive." The word lion has similar meaning in our vocabulary. If you call someone lionhearted, you're describing a courageous and brave person. If you lionize someone, you treat that person with great interest or importance.

Prime habitat for lions is open woodlands, thick grassland, and brush habitat where there is enough cover for hunting and denning. These areas of grassland habitat also provide food for the animals lions prey upon.

# **Mane Attraction**

Lions differ from the other members of the large cat genus, Panthera—tigers, leopards, and jaguars. Adult male lions are much larger than females and usually have an impressive mane of hair around the neck. The color, size, and abundance of the mane all vary among individuals and with age. The mane's function is to make the male look more impressive to females and more intimidating to rival males. The lion's thick mane also protects his neck against raking claws during fights with other males over territory disputes or breeding rights.

# Living with (a) pride

Lions are also the only cats that live in large, social groups called "prides." A pride can have 3 to 30 lions and is made up of lionesses (mothers, sisters, and cousins), and their cubs, along with a few unrelated adult males. The pride has a close bond and is not likely to accept a stranger. The unrelated males stay a few months or a few years, but the older lionesses stay together for life. In dry areas with less food, prides are smaller, with two lionesses in charge. In habitats with more food and water, prides can have four to six adult lionesses. Both males and females scent mark to define their territory.

All for one and one for all

Living in a pride makes life easier. Hunting as a group means there is a better chance that the lions have food when they need it, and it is less likely that they will get injured while hunting. Lion researchers have noticed that some activities are "contagious" within a pride. If one lion yawns, grooms itself, or roars, it sets off a wave of yawning, grooming, or roaring!

# You go, girls!

Lions and lionesses play different roles in the life of the pride. The lionesses work together to hunt and help rear the cubs. This allows them to get the most from their hard work, keeping them healthier and safer. Being smaller and lighter than males, lionesses are more agile and faster. During hunting, smaller females chase the prey toward the center of the hunting group. The larger and heavier lionesses ambush or capture the prey. Lionesses are versatile and can switch hunting jobs depending on which females are hunting that day and what kind of prey it is.

# A king's life

While it may look like the lionesses do all the work in the pride, the males play an important role. While they do eat more than the lionesses and bring in far less food (they hunt less than 10 percent of the time), males patrol, mark, and guard the pride's territory. Males also guard the cubs while the lionesses are hunting, and they make sure the cubs get enough food. When a new male tries to join a pride, he has to fight the males already there. The new male is either driven off or succeeds in pushing out the existing males.

# Lions lying around

A lion's life is filled with sleeping, napping, and resting. Over the course of 24 hours, lions have short bursts of intense activity, followed by long bouts of lying around that total up to 21 hours! Lions are good climbers and often rest in trees, perhaps to catch a cool breeze or to get away from flies. Researchers have often noticed lions lying around in crazy poses, such as on their backs with their feet in the air or legs spread wide apart!

# I hear you

Lions are famous for their sonorous roar. Males are able to roar when they are about one year old, and females can roar a few months later. Lions use their roar as one form of communication. It identifies individuals, strengthens the pride's bond, and lets other animals know of the pride's domain. Other sounds lions produce include growls, snarls, hisses, meows, grunts, and puffs, which sound like a stifled sneeze and is used in friendly situations.

Lions have other forms of communication as well, mostly used to mark territory. They spread their scent by rubbing their muzzle on tufts of grass or shrubs, and they rake the earth with their hind paws, as the paws have scent glands, too. Adult males also spray urine—stand back!

# Dinner at dusk and dawn

Lions usually hunt at night, particularly at dusk and dawn, with lionesses doing most of the work. A lion chasing down prey can run the length of a football field in six seconds. Their eyes have a horizontal streak of nerve cells, which improves their vision following prey across a plain. Lions

have been spotted taking down animals as large as buffalo and giraffes! They may even drag this heavy prey into thickets of brush to keep other animals from getting to it.

Lions hunt antelope and other hoofed animals, baby elephants or rhinos, rodents, reptiles, insects, and even crocodiles. They also scavenge or steal prey from leopards, cheetahs, hyenas, or wild dogs, even eating food that has spoiled. Lions digest their food quickly, which allows them to return soon for a second helping after gorging themselves the first time.

At the San Diego Zoo and the San Diego Zoo Safari Park, the lions get lean ground meat made for zoo carnivores as well as an occasional large bone, thawed rabbit, or sheep carcass.

# Lion school begins early

A lioness gives birth to her cubs in a secluded location away from the pride. At birth, each cub's coat is yellowish brown and marked with distinct dark, rosette-shaped spots or, sometimes, stripes. Cubs remain hidden for four to six weeks as they gain strength, learn to walk, and play with one another and their mother. When they return to the pride, they can nurse from any adult lioness in the pride, not just their own mother. In fact, the females in a pride often give birth around the same time, which makes for lots of playmates!

Cubs born in a pride are twice as likely to survive as those born to a lioness that is on her own. However, if a new adult male takes over the pride, he may kill cubs under one year old so that he can father new ones. Under favorable conditions, a lioness can produce cubs roughly every other year.

From the time they are born, cubs have a lot to learn! At three months old, cubs are able to follow their mother wherever she goes, and they are weaned by the age of six months. At about one year old, males start to get fuzz around their neck that grows into the long mane adult male lions are famous for.

How long a lion cub stays with Mom depends on the sex of the cub. Mothers generally raise males until they are just about two. Once they hit that stage in life, the mother usually runs them out of the group, and they are on their own. Sometimes the sub-adult males form bachelor groups and run together until they are big enough to start challenging older males in an attempt to take over a pride. If the cubs are female, Mom cares for them until about two years of age and they usually stay with the pride they were born into. A mother and daughter may live together for life.

# Nomads seeking territory

Lions that do not live in prides are called nomads, and they range far and wide while following migrating herds of large game. Nomads are generally young males, roaming in pairs or small groups and often related to one another. Females are occasionally nomadic, too. For reason not clearly understood, young females are sometimes driven from their pride just as are young males. As they gain in age and experience, nomadic males may challenge established pride males for dominance of a given territory and its pride of lionesses, or they may join nomadic females and form a new pride.

# HYENA

### http://animals.nationalgeographic.com/animals/mammals/hyena/?source=A-to-Z

Spotted hyenas are famed scavengers and often dine on the leftovers of other predators. But these hardy beasts are also skilled hunters that will take down wildebeest or antelope. They also kill and eat birds, lizards, snakes, and insects.

In an increasingly overpopulated Africa, hyenas and humans come into frequent contact. In fact, the Maasai people of Kenya and Tanzania actually leave their dead to be consumed by hyenas. However, these intelligent and bold animals will raid food stores and crops and are blamed for many livestock and even some human deaths. In some areas they have been heavily hunted as destructive pests.

Spotted hyenas are the largest of three hyena species. Brown and striped hyenas are the other two. Although hyenas appear similar to dogs, they are actually more closely related to cats. They live throughout much of Africa and eastwards through Arabia to India. Spotted hyenas live together in large groups called clans that may include up 80 individuals and are led by females.

Spotted hyenas have good hearing and sharp eyesight at night. They are fast and can run for long distances without tiring. Packs work together effectively to isolate a herd animal, sometimes one that is ill or infirm, and pursue it to the death. The victors often squabble over the spoils, either among themselves or with other powerful animals like lions.

Spotted hyenas are quite vocal and make a wide variety of sounds, including the "laughing" that has long been associated with their name.

# http://animals.sandiegozoo.org/animals/spotted-hyena

Range: Africa, south of the Sahara desert Habitat: Savanna, semi-desert, scrubland, swamp, open woodland, and montane regions

So, you think you know all about spotted hyenas—the ones known to "laugh"? They're in lots of cartoons and movies, and they're usually in the role of giggly villains. But is that a fair description?

It may look like a dog, but the spotted hyena is more closely related to cats, civets, and genets. Also called the laughing hyena, the spotted hyena is a strong, capable hunter. It is the largest member of the hyena family (other members are the striped hyena, brown hyena, and aardwolf). Female spotted hyenas are a bit larger than the males, but otherwise they look exactly the same.

One of a kind

The spotted hyena may look unusual, at first sight. It has a large head with a long, thick, muscular neck and powerful jaws that give the hyena the strongest bite of any mammal. Its front legs are longer than its back legs, giving the animal a profile somewhat like that of a wildebeest or bison. The spotted hyena's paws have four toes with non-retractable claws. The short, coarse fur has a yellow or gray tint covered in spots, which differ among individuals. Its ears are more rounded than that of the other hyenas. A short mane of hair along its back stands upright. Its only true predators are lions and humans.

### Staying cool

These interesting carnivores live in Africa south of the Sahara Desert. They are able to survive in savannas and swamps as well as semi-arid regions and even in mountainous forest areas. Rather than resting in dens, adult spotted hyenas sleep in holes or shallow pools or under bushes or scrubs—anywhere they can find shade during the heat of the day. Hyenas use watering holes as places to cool off or to hide extra food. Spotted hyenas can be active both day and night, depending on their needs and whether there are humans around, but they are generally nocturnal.

#### Mortal enemies

Lions and hyenas compete over the same food in overlapping territories. Sometimes the hyenas do the work of organizing, chasing down, and killing prey only to have lions steal it. Lions often injure or kill hyenas as they fight over a carcass. Both hyenas and lions mark and establish territories, and both species are always on guard. When confronted by a lion, the spotted hyena calls for help from other hyenas.

#### I'll eat that!

Spotted hyenas give new meaning to the phrase "lick the platter clean." They eat practically every part of the animal, including skin, hooves, bone, and teeth. Powerful jaws are able to crush bones with ease. Most other predators couldn't eat those things, even if they tried. There are some items that hyenas can't digest, such as hair and horns, although they still eat them.

At the San Diego Zoo, the spotted hyenas eat a fortified meat-based commercial carnivore diet. They also eat mice, rats, or rabbits once or twice a week. Treats for training purposes include beef heart, large rice-based chew bones, zucchini, cabbage, and carrots. Fish are offered as enrichment.

#### Wildlife buffet

Most people think hyenas are scavengers only. Spotted hyenas do scavenge, but they have to compete with jackals and vultures for these leftovers. In a large group, spotted hyenas are able to chase lions away from a kill. But during a hunt, the hyena's impressive hunting skills come into play. They are able to chase down prey over long distances while running at up to 37 miles per hour (60 kilometers per hour).

Spotted hyenas often pick out the young or weak from the herd, but they can kill even healthy adults of many hoofed species. What they hunt depends on numbers. The bigger the hyena clan, the larger its prey. This can include young rhinos, adult wildebeest, zebras, and Cape

buffalo. The hyenas work in a group when hunting such large prey, and young hyenas take years to become successful. Smaller packs chase down gazelles, impalas, warthogs, and waterbucks.

When hunting alone, a spotted hyena may go after smaller prey. Ground birds, rabbits, springhare, bat-eared foxes, porcupines, jackals, and fish can be on the menu. Even ostrich eggs are fair game! A hyena can eat quite a bit at one time. Sometimes, leftovers are buried in a mud hole for a later meal.

# Whoop!

Spotted hyenas have distinctive vocalizations. In fact, they are the most vocal mammals in Africa, with over 11 different sounds that researchers have recorded. The famous giggle they produce sounds like a human laughing. This "laugh" is used during times of nervous excitement or submission to a dominant hyena. The "whoop" is a call heard for miles and is used to find cubs, advertise territory, or bring the clan together. Spotted hyenas can tell which individual makes the whoop. Groans and squeals are used to greet each other. Other sounds include grunting and growling. Hyenas also use their calls and scent marks to claim their territory.

# A complex clan

The spotted hyena social system is complex. There can be up to 100 individuals in a clan. Spotted hyenas have a matriarchal society. The females are larger and, on average, much more assertive and aggressive to the males. A low-ranking female's cubs rank higher than the highest-ranking adult immigrant male! Lower-ranking males are forced to stay on the outskirts of the clan and are only allowed to join during a hunt or a fight against another clan or lions.

# Tough cubs

Adult females give birth to cubs in isolated dens and later move their cubs to "kindergarten" in communal dens, which are holes previously dug by other animals such as aardvarks. Life starts out rough for a young hyena cub. The average litter has two cubs, and the competition between them starts right away. Cubs are born with dark fur, their eyes open, and some teeth already present. They fight over who will be the dominant one and nurse first, sometimes killing their weaker sibling. Mom keeps the cubs in a private den at first to ensure their survival.

At two to six weeks of age, the mother moves the cubs to a den shared by other mothers in the same clan and their young. Although there may be many cubs from different mothers, each mother nurses just her own. How they hunt, how they eat, and how they fight are all determined by rank within the clan. At about two months of age, the cub starts to lose its brown coat and begins to look like the spotted adults. The young continue to nurse until about one to two years old. Females stay with their birth clan, but the males leave upon maturity at around age three, if not sooner. Half of all spotted hyena young die before they reach maturity.

# Recycling experts of the Serengeti

Spotted hyenas play a major role in Africa. They help control populations of a wide variety of species. And, because they'll eat almost anything, they appear to clean up everything in their

path. While spotted hyenas are not threatened at the moment, things could change. Drought can have drastic effects on the food chain, from herbivores to carnivores.

# Myth buster

The way hyenas are depicted—and have been for centuries—is no laughing matter. They are often vilified and misrepresented as foolish and treacherous, even downright vicious and evil. It's a reputation that these intelligent, resourceful, and efficient creatures do not deserve. Hyenas do not hunt humans, although there are rare reports of killings. Yet some humans shoot hyenas on the spot just because of what they are. The spotted hyena is a clever creature that should bring a chuckle to your heart!

#### http://www.bioexpedition.com/spotted-hyena/

SPOTTED HYENA Spotted Hyena

Class Mammalia Order Carnivora Family Hyaenidae Genus Crocuta Conservation status Least Concern

### Introduction to Spotted Hyena

The Spotted Hyena is often called the Laughing Hyena due to the sounds it makes that are so similar to a human laugh. These animals are often not given much credit for their contribution to the ecosystem. They are the subject of many forms of myths and folk tales throughout cultures around the world.

# Spotted Hyena Description

The body of the Spotted Hyena is long and slender. They are brown in color with black spots and a long tail. They are very similar in the looks of their face to wild canines. They have sharp teeth and when they move their lips they often look like they are smiling which further adds to the image that they are laughing. They have a very good sense of hearing and excellent vision.

#### Spotted Hyena Distribution

The Spotted Hyena has a big location where it is able to live around Africa, specially Sub-Saharan Africa. They tend to stick around areas of water. They know that is where they will have the best chance of being able to find enough food for survival. Due to the demise of their open range though their habitat has increasingly overlapped creating tensions. Spotted Hyena Behavior

One of the biggest battles out there for the Spotted Hyena has to do with the Lions. They tend to fight endlessly over food and territory. They live in clans that can have up to 80 members. The females are the leaders over those clans. There is a great deal of socialization and hierarchy in place in these clans.

The Spotted Hyena is a carnivore and they will hunt as well as consume food that has been left by other predators. They often consume what others left behind because they have teeth that allow it to be able to get through bones and other tough materials that those other hunters had to leave behind. They also have a digestive system that enables them to consume food that has been left rotting in the hot sun.

They are very skilled when it comes to hunting for their own resources of food. They will get several members to confuse the herd while others are focused on the target of prey that they plan to take down. This is how they often get wildebeest, impala, zebra and antelope. They can also hunt on their own for rodents, reptiles, birds, and insects.

One of the elements of the Spotted Hyena that make people uneasy is that they are said to consume humans. There are no records of them every actively hunting them. However, some cultures including those of people in Kenya and Maasai will leave the bodies of their dead for them to consume. They will kill livestock and they are bold in their efforts of raiding food supply locations of villagers.

# Spotted Hyena Reproduction

Mating can occur for the Spotted Hyena during any time of the year. As long as they have habitat and food they will do so. When those basic needs are being hard to find then they will be less likely to do so. Most of the births do occur during the wet seasons though. The males in a clan may become very aggressive in an effort to be able to get the approval of a female for mating with her.

After mating has occurred the gestation period is about 110 days. The females will find an abandoned den where they can call home in the weeks before they give birth. It isn't uncommon for several females and their young to all be found in the same den. She may have from 2 to 4 per litter. They can live up to 25 years in the wild.

# GAZELLE

# http://animals.nationalgeographic.com/animals/mammals/gazelle/

#### Thomson's Gazelles

Gazelles are medium-sized antelopes found in Africa and in Asia as far east as Mongolia. There are some 19 different species of gazelles.

These grazing antelopes live in herds, which can consist of as few as ten or as many as several hundred animals. During the plentiful rainy season, thousands of animals can be seen gathering in large groups.

Gazelles typically frequent wide-open spaces and plains, where they browse on grasses, shoots, and leaves.

Open plains make them visible to predators like cheetahs or wild dogs, but gazelles are fleet of foot. The Thomson's gazelle can reach speeds of 40 miles (64 kilometers) an hour.

Some gazelle species eschew the grasslands for mountainous landscapes or even deserts. During the dry season some grassland gazelles will even take to the African bush in search of water.

Gazelles are nimble and beautiful animals, with a variety of stripes and markings that accentuate their tan buff coats and white rumps. They also boast a impressive, ringed horns. These attributes make many gazelles attractive as game animals.

After a pregnancy of about six months, female gazelles give birth to one or two young and hide them in the plains grasses. These infants will remain out of sight for days or even weeks, being periodically nursed by their mother, until they are old enough to join the mother's herd, in the case of females, or a bachelor herd.

# http://www.livescience.com/27545-fun-facts-about-gazelles.html

Gazelles are thin, graceful antelopes that live in Africa and Asia. They resemble deer and are in the same family as goats, cattle and sheep. Gazelles can be identified by their curved, ringed horns, tan or reddish-brown coats and white rumps. Often, there are spots or stripes on their coats. Their light frames help make them agile and better able to escape from predators.

There are 19 species of gazelle, according to the Integrated Taxonomic Information System(ITIS). Smaller species, such as the Speke's gazelle and Thomson's gazelle, are only 20 to 43 inches (51 to 109 centimeters) at the shoulder. They weigh from 26 to 165 pounds (12 to 75 kilograms). The dama gazelle is the largest gazelle. It weighs in at 88 to 165 pounds (40 to 75 kg) and is 4.5 to 5.5 feet tall (137 to 168 cm).

# Habitat

Most gazelles live in the hot, dry savannas and deserts of Africa and Asia. To stay hydrated in these grueling environments, gazelles shrink their heart and liver, according to a study published in the journal Physiological and Biochemical Zoology. Breathing can cause an animal

to lose a lot of water. A smaller heart and liver need less oxygen, so the animal can breathe less and lose less water.

The Edmi gazelle, also known as the Cuvier's gazelle, is the only gazelle that lives in the mountains. It migrates during the wintertime to warmer regions.

#### Habits

Gazelles rely on their speed to escape from predators. Gazelles can reach speeds up to 60 mph in short bursts and sustain speeds of 30 to 40 mph. When running, gazelles use a bounding leap, called "pronking" or "stotting," which involves stiffly springing into the air with all four feet.

These animals are highly social. Some gazelle herds have as many as 700 members, though some herds are small and segregated by gender. Female Thomson's gazelles, for example, live in herds of 10 to 30 females in addition to their young. Males live alone or in small groups with other males. A male herd is called a bachelor's herd. The segregation of herds is more prominent during mating season.

#### Offspring

Mating season is usually timed to occur during the rainy season so that the newborn fawns will have plenty to drink.

Gazelles carry their young for around six months before giving birth. They have one to two young at a time. Baby gazelles are called fawns or calves.

To keep her calves safe from predators, a female gazelle will hide her babies in tall grasses. While the young are still nursing, they stay with their mother's herd. When they are ready to fend for themselves, male calves are moved to the male herd. Gazelles typically live 10 to 12 years.

#### Diet

Gazelles are herbivores. This means they only eat vegetation, typically grasses, leaves and shoots of plants. According to "Endangered Wildlife and Plants of the World, Volume 5" (Marshall Cavendish Corp., 2001) some gazelles can live their entire lives and never drink any water.

Classification/taxonomy The taxonomy of gazelles, according to ITIS, is:

Kingdom: Animalia Phylum: Chordata Subphylum: Vertebrata Class: Mammalia Order: Artiodactyla Family: Bovidae Genus: Gazella Species: 19, including G. thomsonii (Thomson's gazelle), G. spekei (Speke's gazelle), G. dorcas (Dorcas gazelle) and G. dama (dama gazelle). There are many vulnerable and endangered species of gazelle. For example, the Cuvier's

gazelle's population is estimated at only 1,750 to 2,950, according to International Union for

Conservation of Nature's Red List. Another endangered species is the slender-horned gazelle. It is estimated that there are only a few thousand left.

### Conservation status

The dama gazelle is not only the world's biggest gazelle, it is also the rarest, according to the Smithsonian National Zoological Park. It is critically endangered and has a population of less than 500.

The major threat facing gazelles is hunting. The Queen of Sheba's gazelle became extinct when it was hunted for food in 1951 by soldiers, according to the IUCN.

The name gazelle comes from the Arabic "gazal," the term for love poems.

A gazelle will flick its tails or stomp its feet to warn others of a lurking predator.

The horns of the Edmi gazelle can grow to 14 inches (35.5 centimeters) long.

Goitered gazelles get their name from the large bump on their throats. The bump is larger on males. It is a large patch of cartilage that helps them bellow loudly to potential mates during mating season.

Gazelles can stand on their back legs to reach leaves high in the branches of trees.

#### http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-dama.cfm

DAMA GAZELLE

It's a Boy! Dama Gazelle Born at the Smithsonian's National Zoo

Order: Artiodactyla

Family: Bovidae

Genus and Species: Gazella dama

Also known as the addra gazelle, the dama gazelle is the largest of all gazelles. It is also the world's rarest.

PHYSICAL DESCRIPTION

This large gazelle has a slender neck and legs, and somewhat S-shaped horns. It is white with reddish-brown coloring, but the pattern varies by region. Dama gazelles in the western part of their range are more reddish-brown than those in the east. Coloration also varies by age and season. The head is typically pale.

#### SIZE

This gazelle may have a shoulder height of nearly four feet. Its head and body length may range from four and a half to five and a half feet, and its tail may be up to a foot long. Adults may weigh 88 to 165 pounds.

# STATUS

The World Conservation Union's Red List of Threatened Species lists the dama gazelle as critically endangered. There may be only a few hundred of these gazelles left in the wild. GEOGRAPHIC DISTRIBUTION

Dama gazelles once ranged across northern Africa, from the Atlantic to the Nile. Now, they can be found in a few isolated areas in Chad, Mali, and Niger.

#### HABITAT

These gazelles live on Sahelian grasslands, savanna, and sub-desert steppes. DIET Dama gazelles eat shrubs, succulents, herbs, trees, and woody plants. Dama Gazelle REPRODUCTION About six and a half months after mating, females give birth to a single fawn. It is weaned after about six months. BEHAVIOR They may lead a solitary life or live in a group of up to 15 individuals. FUN FACT Dama gazelles may stand on their hind legs to eat from acacia trees and other plants as high as six feet from the ground.

# http://www.outtoafrica.nl/animals/enggrantsgazelle.html

Grant's gazelle FACT FILE: Swahili Name: Swala Granti Scientific Name: Gazella granti Size: 30 to 36 inches at the shoulder 100 to 145 pounds Weight: Lifespan: 12 years Habitat: Open grass plains Diet: Herbivorous/browsers/grazer Gestation: 7 months Predators: Humans, all major predators Grant's gazelles resemble Thomson's gazelles, and the two species are often seen together.

They are similarly colored and marked, but Grant's are noticeably larger than Thomson's and easily distinguished by the broad white patch on the rump that extends upward, beyond the tail and onto the back. The white patch on the Thomson's gazelle stops at the tail. Some varieties of Grant's have a black stripe on each side of the body like the Thomson's gazelle; in others the stripe is very light or absent. A black stripe runs down the thigh.

# Physical Characteristics

The various types of Grant's gazelle differ mainly in color and in the size and shape of the horns. Grant's are large, pale, fawn-colored gazelles with long legs. The males are larger and heavier and their horns longer than the females.

The lyre-shaped horns are stout at the base, clearly ringed and measuring from 18 to 32 inches long. The width of the spaces between the horns and the angles of growth differ among the various types of Grant's gazelles. One type, in northwest Tanzania, has widely diverging horns, with the tips directed downwards.

On the females black skin surrounds the teats, with white hair on the udder. This probably helps the young recognize the source of milk. When a fawn is older and moving about with its mother, the dark stripe on the white background may serve as a beacon for it to follow.

# Habitat

Grant's gazelles are especially fond of open grass plains, and although they frequent bushy savannas, they avoid areas of high grass.

#### Behavior

Grant's gazelles may remain in areas where food is plentiful. Mature males establish territories they may hold as long as eight months. A male tries to detain the female herds of 10 to 25 individuals as they pass through these territories while they move about to feed. At the same time males chase off rival males and try to mate with females in estrus.

Grant's gazelles have developed several ritualized postures. For example, the territorial male stretches and squats in an exaggerated manner while urinating and dropping dung. This apparently warns other males to stay away and reduces the number of confrontations. Younger males will fight, but as they grow older the ritualized displays often take the place of fights. When fighting does occur, it also is ritualized. It starts with "pretend" grooming, repeated scratching of the neck and forehead with a hind foot and presenting side views of the body. If neither combatant is intimidated, they may confront one another and clash horns, trying to throw the other off-balance.

#### Diet

The gazelles vary their diet according to the season. They eat herbs, foliage from shrubs, short grasses and shoots. Grant's gazelles are not restricted to certain habitats by a dependency on water, but obtain the moisture they need from their food. Grant's have unusually large salivary glands, possibly an adaptation for secreting fluid to cope with a relatively dry diet. They typically remain in the open during the heat of the day, suggesting an efficient system to retain the necessary fluid in their bodies.

# Caring for the Young

Breeding is seasonal, but not firmly fixed. Gestation is approximately 7 months, and the young are born in areas that provide some cover. The newborn fawn is carefully cleaned by the mother who eats the afterbirth. Once the fawn can stand up and has been suckled, it seeks a suitable hiding place. The mother watches carefully and evidently memorizes the position before moving away to graze. She returns to the fawn three to four times during the day to suckle it and clean the area. The lying-out period is quite long-two weeks or more.

The fawn eats its first solid food at about 1 month, but is nursed for 6 months. Grant's become mature at about 18 months. By that time the young males will have joined an all-male bachelor herd, but it will be some time before they become territory holders, if at all. Males from the bachelor herds challenge the territorial males, but only the strongest win territories, which they mark with combined deposits of dung and urine.

# Predators

All the major predators kill Grant's gazelle, but cheetahs and African hunting dogs are the most prevalent. In some areas jackals prey on the young. Because of its adaptation to semi-arid and subdesert ranges as well as its good meat and valuable skin, Grant's gazelle has been one of the species that scientists consider as a potential source of protein for humans.

Did you know?

The only relatively long-lasting relationship in gazelle society is that of a mother and her most recent offspring.

Grant's are gregarious and form the usual social groupings of small herds of females with their offspring, territorial males and all-male bachelor groups. Membership in these groups is temporary.

# ZEBRA

# http://animals.nationalgeographic.com/animals/mammals/zebra/

No animal has a more distinctive coat than the zebra. Each animal's stripes are as unique as fingerprints—no two are exactly alike—although each of the three species has its own general pattern.

Why do zebras have stripes at all? Scientists aren't sure, but many theories center on their utility as some form of camouflage. The patterns may make it difficult for predators to identify a single animal from a running herd and distort distance at dawn and dusk. Or they may dissuade insects that recognize only large areas of single-colored fur or act as a kind of natural sunscreen. Because of their uniqueness, stripes may also help zebras recognize one another.

Zebras are social animals that spend time in herds. They graze together, primarily on grass, and even groom one another.

Plains (Burchell's) zebras are the most common species. They live in small family groups consisting of a male (stallion), several females, and their young. These units may combine with others to form awe-inspiring herds thousands of head strong, but family members will remain close within the herd.

Zebras must be constantly wary of lions and hyenas. A herd has many eyes alert to danger. If an animal is attacked, its family will come to its defense, circling the wounded zebra and attempting to drive off predators.

# http://animals.sandiegozoo.org/animals/zebra

Range: Eastern and southern Africa

Habitat:

Mountain and plains zebras live in grasslands and savannas; Grevy's zebras live in sub-desert and arid grasslands

Reading between the lines

Despite their appearance, zebras aren't just black and white. They are sturdy, spirited animals that are a study in contrasts: willful and playful, social and standoffish, resilient and vulnerable. Their life in a herd can be complex, yet they also find safety in numbers. They are prey for predators, but they are by no means shrinking violets when it comes to defending themselves. Read between the lines, and you'll discover that the world of the zebra is colorful indeed!

# Wild horses

Zebras are equids, members of the horse family. They have excellent hearing and eyesight and can run at speeds of up to 35 miles per hour (56 kilometers per hour). They also have a powerful kick that can cause serious injury to a predator, like a lion, a hyena, or an African wild

Zebras often trot when moving to new pastures, which is a fairly fast but easy gait for them to use over the long distances they may have to travel. Their hard hooves are designed to withstand the impact of their body weight and to run easily over rocky ground. When resting at night, zebras lie down while one stands watch to prevent an ambush.

# Stripes: White with black or black with white?

This is one of the most-asked questions about zebras. So what's up with the stripes? Zebras are generally thought to have white coats with black (sometimes brown) stripes. That's because if you look at most zebras, the stripes end on their belly and toward the inside of the legs, and the rest is all white. However (there had to be a catch, right?), some zebras are born with genetic variations that make them all black with white stripes, or mostly dark with the striped pattern on just part of their coats. And as it turns out, zebras have black skin underneath their hair. So it depends on how you look at it!

So, why the stripes? They serve as a kind of protection from predators! When zebras are grouped together, their combined stripes make it hard for a lion or leopard to pick out one zebra to chase. Zebra stripes are unique to each individual, and researchers in the field have used zebras' individual stripe patterns for identification.

# Not all zebras are created equal

It might seem like a zebra is a zebra, but there are three different species: plains, mountain, and Grevy's zebras. Different zebra species have different types of stripes, from narrow to wide. In fact, the further south on the African plains you travel, the farther apart the stripes on the zebras get! The basic form of zebras—a large head, sturdy neck, long legs, a dorsal stripe along the spine and down a tasseled tail, and bristly mane—is universal. No zebra, or other wild equid, has a forelock.

Now for the differences:

- The Grevy's zebra is the largest, weighing from 770 to 990 pounds (350 to 450 kilograms) and measuring up to 5 feet (1.5 meters) at the shoulder. Its thick neck and large, round ears give the Grevy's zebra the most mule-like physique. The Grevy's zebra also has the thinnest stripes, extending all the way down to their white belly; on the hindquarters the stripes are vertical until above the hind legs.

- A mountain zebra has vertical stripes on the neck and torso, which graduate to wider and fewer—horizontal bars on the haunches. It has a gridiron pattern on the rump, and its white underside has a dark stripe that runs the length of the belly. A mountain zebra also has a distinctive dewlap on the throat that looks a bit like an Adams' apple.

- The plains zebra is the most abundant and the smallest of the three zebra species. Some subspecies have a stripe pattern different from all others: brownish "shadow" stripes between the black stripes on their coat. Grevy's zebras live in semi-arid grassland habitat in Kenya, Ethiopia, and Somalia. Mountain zebras, as their name implies, inhabit rocky, arid slopes in Namibia and Angola. Plains zebras, which are the most abundant of the three zebra species, are found from the grasslands of East Africa to the scrubby woodlands of southern Africa. They are one of Africa's most successful and adaptable large herbivores. A subspecies of the plains zebra, the Grant's zebra, is famous for its spectacular migrations during the rainy season in the Serengeti, when as many as 10,000 of these animals can be seen journeying together in congregated herds.

#### Mowing the fields

Zebras are herbivores and feed mostly by grazing on grasses, although they also might browse a bit on the leaves and stems of bushes. They graze for many hours each day, using their strong front teeth to clip off the tips of the grass. Their back teeth then crush and grind the food. Spending so much time chewing wears the teeth down, so those teeth keep growing all their lives.

As the dry season arrives and the grasses die back, zebra herds travel to find more food and water holes for drinking. Most zebras are considered nomadic, without specific territories. The exception is the Grevy's zebra. Stallions of this species mark out territories with urine and dung. The mares, their foals, and immature males wander through as they wish. If food becomes scarce, though, the stallions leave their territories for a while and travel with the larger herds.

Zebras at the San Diego Zoo and the San Diego Zoo Safari Park are fed hay, alfalfa, and carrots.

#### Scratch my back and I'll scratch yours

Plains and mountain zebras are social herd animals, living in family groups with a stallion, several mares, and their offspring. During certain times of the year, these groups gather together to form loosely associated herds of up to several hundred, but the family groups still stay together within these larger groups. Grevy's zebras do not have a herd system, and males and females have no permanent bonds. Grevy's zebra stallions establish territories, with mares crossing through them to breed and foal. Once the foals are old enough to travel, the mares usually leave the protection of the stallion's territory to continue their nomadic lifestyle.

Zebras communicate with one another with facial expressions and sounds. They make loud braying or barking sounds and soft snorts and whuffs. The position of their ears, how wide open their eyes are, and whether their mouths are open or their teeth are bared all mean something. Ears flat back, for example, means trouble, or you better follow orders! Zebras also reinforce their bonds by grooming each other. You might see two zebras standing head to back, apparently biting each other, but they are really only nibbling on each other with their teeth to pull out loose hair and get a good scratch.

Run, baby, run!

Like domestic horses, zebras put a good deal of energy into raising their offspring. Zebra foals have soft, fuzzy fur, and their stripes are usually brown and white at first. Their legs are already almost as long as an adult zebra's and they can walk just 20 minutes after birth and can run after an hour! This is important, since the mare needs to move with the herd to find food and water. She cannot leave the foal behind, so it must be up and running quickly in order to stay with the family.

Foals must be able to recognize their mother from birth in order to survive. A foal learns its mother's stripe pattern in order to follow her. Mares usually do not adopt other foals, so there would be no chance of getting food from anyone but Mom. Mothers often separate from the herd a short distance so that their foals can imprint on them. Once the foal can readily identify its mother, the mare and her foal return to the herd for protection.

# http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-gzebra.cfm

# GREVY'S ZEBRA

Order: Perissodactyla

Family: Equidae

Genus and Species: Equus grevyi

In its habits and geographic distribution, the Grevy's zebra occupies a middle ground between asses and other zebras.

PHYSICAL DESCRIPTION

Big heads, large and rounded ears, and thick, erect manes make the Grevy's zebra appear more mule-like than other zebras. In fact, many experts consider Grevy's zebras to be striped asses that are not closely related to other zebras. Their coats sport dazzling narrow stripes that wrap around each other in a concentric pattern and are bisected by a black stripe running down the spine.

SIZE

Grevy's zebras grow up to nine feet long, weigh up to 990 pounds, and stand up to almost five and a half feet at the shoulder. On average, males are about ten percent larger than females. GEOGRAPHIC DISTRIBUTION

Grevy's zebras live in northern Kenya and southern and eastern Ethiopia.

STATUS

Grevy's zebra is listed as endangered on the World Conservation Union's (IUCN's) Red List of Threatened Animals.

Grevy's Zebras in the Snow

HABITAT

Grevy's zebras inhabit semi-desert areas, including arid grasslands and dusty acacia savannas. The most suitable areas have water year-round.

NATURAL DIET

Grevy's zebras graze primarily on tough grasses, but they also browse on leaves, which may constitute up to 30 percent of their diet.

REPRODUCTION

Grevy's zebras usually mate in August, September, and October, and bear foals during the rainy seasons. After mating, females give birth to a single foal 13 months later. Foals nurse heavily for half a year and may travel with their mothers for three years. Groups of females with young form herds of up to 200 animals.

LIFE SPAN

In zoos, Grevy's zebras may live to about 20 years old; longevity in the wild is likely shorter.

# BEHAVIOR

Males are highly territorial, claiming prime watering and grazing areas with piles of dung called middens. They generally live alone in their territories, except when females move through during mating season. Non-territorial males travel together in groups of two to six animals. This social system differs from that of other zebras, which typically form female harems that live in one male's territory all year. During dry months, many Grevy's zebras migrate to greener mountain pastures, but males on prime territories often remain there year-round.

# PAST/PRESENT/FUTURE

Fossils reveal that Grevy's zebras ranged at least to Egypt (and perhaps beyond Africa) until about 6,000 years ago. In historic times, Grevy's zebras were found in parts of Ethiopia, Kenya, and Somalia. Due to hunting for their skins and for food, they no longer live in Somalia, and their range in Ethiopia and Kenya is reduced. The total wild population is probably fewer than 6,000 animals. Competition with domestic grazing animals, habitat destruction, and human disturbance at critical water holes contribute to their decline. Also, poorly regulated ecotourism —especially when vehicles leave roads and disturb the animals—may affect breeding in some parks. Better protection and linkages between important park areas are essential for Grevy's zebras' survival.

# FUN FACTS

The Grevy's zebra is the largest wild member of the horse family.

Each zebra has its own unique set of stripes, which are as distinctive as fingerprints. A denizen of extremely dry places, Grevy's zebras were once widespread in Africa and perhaps outside the continent. Some scientists think plains zebras (Equus burchelli) took their place after less arid savannas replaced more arid ones in many areas.

#### A FEW GREVY'S ZEBRA NEIGHBORS

Cheetah (Acinonyx jubatus): The world's fastest and most specialized cat shares some of the Grevy's zebra's strongholds.

Beisa oryx (Oryx gazella beisa): A large, long-horned antelope with black stripes on its flanks and face.

Vulturine guineafowl (Acryllium vulturinum): A bare-headed gamebird with dazzling black, blue, and white plumes.

By saving Grevy's zebra habitat, we protect these and many other animals.

# WILDEBEEST

#### http://animals.nationalgeographic.com/animals/mammals/wildebeest/

The ungainly gnu earned the Afrikaans name wildebeest, or "wild beast," for the menacing appearance presented by its large head, shaggy mane, pointed beard, and sharp, curved horns. In fact, the wildebeest is better described as a reliable source of food for the truly menacing predators of the African savanna: lions, cheetahs, wild dogs, and hyenas.

The gnu (pronounced "g-new" or simply "new") is a member of the antelope family, although its heavy build and disproportionately large forequarters make it look more bovine. Gnus can reach 8 feet (2.4 meters) in length, stand 4.5 feet (1.4 meters) tall at the shoulders and weigh up to 600 pounds (272 kilograms). Both males and females grow horns.

Their habitat comprises the grassy plains and open woodlands of central, southern, and eastern Africa, particularly the Serengeti in Tanzania and Kenya. They travel in large herds and are active day and night, grazing constantly.

Their spectacular northward migration in search of greener pastures is dictated by weather patterns, but usually takes place in May or June. It is considered one of the greatest wildlife spectacles on Earth, involving up to 1.5 million wildebeests as well as hundreds of thousands of other animals, including zebra and gazelle.

Up to 500,000 calves are born in February and March each year, at the beginning of the rainy season. Calves learn to walk within minutes of birth and within days are able to keep up with the herd. Gnus can live to be 20 years old.

Fast Facts

Type: Mammal Diet: Herbivore Average life span in the wild: 20 years Size: Up to 4.5 ft (1.4 m) Weight: 330 to 550 lbs (150 to 250 kg ) Group name: Herd

# http://www.outtoafrica.nl/animals/engwildebeest.html

Wildebeest FACT FILE: Swahili Name: Nyumbu Ya Montu Scientific Name: Connochaetes taurinus Size: 50 to 58 inches at the shoulder Weight: 265 to 600 pounds Lifespan: 20 years Habitat: Open woodland and open grassy plains Diet: Grazers Gestation: 8 to 81/2 months Predators: Lions, cheetahs, hunting dogs, hyenas

There is no other antelope like the wildebeest. It looks like it was assembled from spare parts – the forequarters could have come from and ox, the hindquarters from an antelope and the mane and tail from a horse. The antics of the territorial bulls during breeding season have earned them the name "clowns of the savanna."

The species that forms the large herds of the Serengetis-Mara ecosystem of Tanzania and Kenya is variously known as the brindled, blue- or white-bearded gnu. Scientists do, however, make a distinction and list the blue as a separate race restricted to southern Tanzania. The wildebeest described here is the white-bearded of southern Kenya and northern Tanzania.

#### **Physical Characteristics**

The head of the wildebeest is large and box-like. Both males and females have curving horns, that are close together at the base, but curve outward, inward and slightly backward. The body looks disproportionate, as the front end is heavily built, the hindquarters slender and the legs spindly.

The wildebeest is gray with darker vertical stripes that look almost black from a distance. This species has a dark name and a long tail. Newborns are a yellowish-brown, but change to adult color at about 2 months.

#### Habitat

Large herds of wildebeest are located in the plains and acacia of eastern Africa.

#### Behavior

In the Serengeti-Mara ecosystem the animals make a migratory circle each year of 500 to 1,000 miles. The migration starts after the calving season in January and February on the short grass plains in the southeastern Serengeti. Wildebeests move west toward Lake Victoria, across the grass savanna to the open woodlands, then turn north into the Mara. They then begin the return trip to the south. They are relentless in their advance and will swim rivers and lakes in such huge masses that many are injured, lost (especially in the case of calves) or killed.

Wildebeest are continually on the move as they seek favorable supplied of grass and water. Active both day and night, they often string out in long single columns when on the move. They also cover long distances at a slow rocking gallop but can run fast when necessary. Zebras and Thomson's gazelles, and some of their many predators, accompany the migrating wildebeests.

During mating season smaller breeding groups of about 150 animals form within the massive herds. In these small groups, five or six of the most active bulls establish and defend territories that females wander through. The bulls go through all kinds of antics, galloping and bucking around their territories. They paw the ground and rub their heads on it, spreading secretions produced by the preorbital and interdigital glands. They also urinate and defecate in a certain spot and toll in it to signal to other bulls to stay away.

When neighboring bulls meet at the edges of their territories they go through a highly ritualized "challenge" in which they paw the ground, buck, snort and fight. They typical combat position in on their knees, facing one another, with their foreheads flat on the ground – they knock heads and hit at the base of the horns but seldom injure one another. Some scientists believe these

challenges may increase hormone levels, as the nonterritorial bulls in the bachelor herds are very placid.

# Diet

Strictly grazers, wildebeest prefer short grass. They are unable to go without water for more than a few days.

### Caring for the Young

Wildebeest females give birth to a single calf in the middle of the herd, not seeking a secluded place, as do many antelopes. Amazingly, about 80 percent of the females calve within the same 2- to 3- week period, creating a glut for predators and thus enabling more calves to survive the crucial first few weeks. A calf can stand and run within minutes of birth. It immediately begins to follow its mother and stays close to her to avoid getting lost or killed by waiting predators. Within days, it can run fast enough to keep up with the adult herd.

A calf eats its first grass at about 10 days, although it is still suckled for at least 4 months. Even after weaning, it will remain with the mother until the next year's calf is born. At that time the young males are driven away, but the females often remain in the same groups as their mothers.

# Predators

Wildebeest are the preferred prey of lions and spotted hyena. Although the animals have no camouflage coloring, they get some protection from gathering in large herds. (If a calf loses its mother it will imprint on and follow whatever is closest – a car, a person or occasionally even a predator, but in the later case, probably not for long.)

# Did you know?

The wildebeest is one of the few African antelopes to have extended its range in the last 50 years. They numbered about 250,000 in 1960 and are thought to number 1.5 million today. Wildebeest, or gnus, (pronounced 'news'), are noisy. They constantly emit low moans and if disturbed, snort explosively.

# http://www.bioexpedition.com/wildebeest/

Class Mammalia Order Artiodactyla Family Bovidae Subfamily Alcelaphinae Genus Connochaetes Conservation status Least Concern

#### Introduction to Wildebeest

The Wildebeest belongs to the animals known as antelope. They are very fast, agile, and powerful. They can be between 4 and 5 feet tall and weigh as much as 600 pounds. The males weigh more than the females. There are two species – blue and black. The differences have to do with the horn curving and the color of their fur.

Wildebeest Description

The body of this animal is very large and stocky. They have powerful hooves that are designed to allow them to go over rugged terrain. They also prevent the animal from slipping or sliding in the mud. They are a dark black with stripes. They have horns that are curved to help them have protection from enemies. The back end of the body closely resembles that of an ox. Wildebeest Distribution

Along the plains and open woodlands of Africa are where you will find the Wildebeest. Today many of them are protected along the Serengeti National Park. Tanzania and Kenya also have populations of them. They have migration periods that they follow for food and for water. The drought can determine when they will head along those migrational routes. These routes are often from 500 to 1,000 miles. The journey can be very long and difficult for the young and for those that are injured or older. The herd can't slow down to wait for those that can't keep up.

# Wildebeest Behavior

The Wildebeest are very vulnerable to various big cats and other predators in the wild. That is why they live in large herds. Typically, it is the young and the sick that are more vulnerable. They also stay close to Zebras and it is believed that it also helps to offer them more protection. The Zebras can be prey that the predators will get instead of a Wildebeest. They also share alarm calls when there could be a predator out there.

These animals have lookouts that help to protect the herds. They will make noise and run when there is a risk, and that encourages all of them to run. Most predators won't go after a healthy Wildebeest as a kick from one of them could severely injure or kill that predator. The herds of Wildebeest can be from 150 to many thousands of them. It depends on the location and the availability of food. They form many sub units within their larger herds. They may divide up if they are having trouble finding enough food. By branching off in smaller herds they increase the overall chances of survival.

# Wildebeest Feeding

Grass, shrubs, herbs, and plants are the diet of the Wildebeest. They don't stay in one place to eat. Instead, they graze around a very large migrational route. They will move along based on food availability, water or drought production, and even predators that may be in a given location. Their survival depends on food so they will do all they can to find it.

# Wildebeest Reproduction

The rainy season is the time of year when mating will occur for the Wildebeest. The males may become very aggressive with each other to be able to mate with females. The males will be very entertaining for the females they wish to mate with. In fact, they are nicknamed the clowns of the savanna for this reason.

The mother will give birth to the young about 8 to 9 months later. All of the young in a herd are born within a 3 week window. Even though the mothers are great caregivers there is a high mortality rate. They young have to stay very close to their mothers if they are going to be considered to risky for predators to approach.

# Vervet Monkey

### http://a-z-animals.com/animals/vervet-monkey/Vervet Monkey Classification and

#### Evolution

The Vervet Monkey is a medium to large sized monkey that is primarily found in Eastern Africa. The Vervet Monkey is thought to be a species of Grivet, another tree-dwelling African monkey that has very similar characteristics to the Vervet, along with the Malbrouck which is considered by some to be a sub-species of Vervet Monkey. These three animals are very closely related but they tend to inhabit territories in slightly different locations and are thought to rarely come into contact with one another. There are currently six recognised sub-species of the Vervet Monkey that are generally classified depending on their location, although there is some difference in colouration between them.

#### Vervet Monkey Anatomy and Appearance

The Vervet Monkey grows to an average of 50cm tall, with a tail that is often longer than the body itself and has a black tip. Their fur tends to be grey or olive in colour (depending on the species) and is lighter on their underside. The hands and feet of the Vervet Monkey are black, along with their ears and face which has a white band above it and is also framed by white cheek tufts. The Vervet Monkey has long arms and legs which are about the same length to allow this species to walk on all fours when on the ground with ease, and actually makes them quite speedy when running. Males tend to be larger than females and are easily distinguished by their bright blue testicles.

#### Vervet Monkey Distribution and Habitat

The Vervet Monkey is found south of the Sahara and is widespread across Eastern Africa. They are also found in parts of southern and western Africa from Uganda to Ghana but their location is generally dependant on the sub-species. The Vervet Monkey inhabits savanna, woodland and forests that tend to be close to water, preferring acacia forests that line rivers and lakes. Vervet Monkeys can also be found in mountainous regions up to 1,300 feet providing that there is an adequate supply of both food and water to sustain the population. They are rarely found in more extreme environments such as deserts and rainforests as these regions simply do not have everything that Vervet Monkeys require to successfully survive.

# Vervet Monkey Behaviour and Lifestyle

The Vervet Monkey is an arboreal monkey which means that it spends most of it's time in the safety of the trees. Although they do venture down to the ground in search of both food and water, Vervet Monkeys rarely go further than 450 meters from the trees, which helps to protect them from predators. They are diurnal animals spending the days foraging for food and then rest at night. The Vervet Monkey is a very sociable animal inhabiting territories in troops that can contain between 10 and 50 individuals, depending on the location and how ample the food supply is. These troops are comprised of adult females and their young, with males wandering between different troops to both socialise and mate.

# Vervet Monkey Reproduction and Life Cycles

The Vervet Monkey is not usually able to reproduce until they are about five years old, although their age of sexual maturity is known to vary slightly and may be dependent on how much food they have access too. After about 5 and a half months, females give birth to a single infant which is cleaned by it's mother at birth, and clings to her stomach during the first week or so. Vervet Monkey babies quickly develop strong social bonds with other monkeys and are known

to begin interacting and playing with them by the time they are a month old. They have pink faces and black fur and don't tend to develop their adult colouration until they are a few months old. Vervet Monkey offspring suckle on their mother's milk until they are nearly four months old and start to eat softer vegetation, but they are not fully weaned until they are about a year old.

### Vervet Monkey Diet and Prey

The Vervet Monkey is an omnivorous animal, meaning that they consume both plant matter and other animals in order to get the nutrition that they need to survive. Leaves and young shoots make up the bulk of the Vervet Monkey's diet, along with tree bark, flowers and fruits that can also be found in the trees surrounding them. On the ground Vervet Monkeys forage for roots, bulbs, seeds and grasses and are also known to supplement their diet with insects, eggs, rodents, birds and other small animals. Like many other monkey species, the Vervet uses it's incredibly dexterous hands in order to collect food, with it's long tail aiding in balancing on the tree branches.

# Vervet Monkey Predators and Threats

The Vervet Monkey has few predators whilst it remains in the safety of the trees with larger species of Eagle being their most common threat. On the ground however, they are preyed upon by a number of Africa's large predators including felines like the Leopard, Serval and Caracal, along with large reptiles such as Pythons, and Crocodiles close to water. Never venturing too far from the trees means that the Vervet Monkey can quickly make it back up into safety, and it's ability to run at speed allows them to try and escape more quickly. Although Vervet Monkeys generally only make chattering sounds, they are known to scream and whistle to alert other members of the troop that they are in danger.

# Vervet Monkey Interesting Facts and Features

Despite the fact that the Vervet Monkey tends to reach sexual maturity after a number of years in the wild, sexual maturity in captivity tends to occur much sooner at an average age of two years old. They are incredibly well adapted to their surrounding environments as they can jump and climb well when in the trees and are pretty speedy on the ground, along with being excellent swimmers. Younger females in the troop that are not yet mature, often show a keen interest in the offspring of adult females and assist them with grooming and caring for their young. They are also known to love to hold them, making it not wonder that social bonds within the troop particularly between relatives, often last for life.

#### https://www.awf.org/wildlife-conservation/vervet-monkey

Scientific name: Cercopithecus aethiops Weight: 7 to 17 lb. Size: 18 to 26 in. Life span: Up to 24 years in captivity Habitat: Woodland, savanna, high bush Diet: Omnivorous Gestation: 5.5 months Predators: Leopards, eagles

Where do vervet monkeys live?

In East Africa, vervet monkeys can live in mountain areas up to about 13,000 feet, but they do not inhabit rain forests or deserts. Their preferred habitat is acacia woodland along streams, rivers, and lakes.

#### What is a vervet monkey?

The vervet is a small, black-faced monkey, common to East Africa. There are several subspecies of vervet monkeys, but, generally, the body is a greenish-olive or silvery-gray. The face, ears, hands, feet, and tip of the tail are black, but a conspicuous white band on the forehead blends in with the short whiskers. The vervet is classified as a medium- to large-sized monkey. Its tail is usually held up, with the tip curving downward, and its arms and legs are approximately equal lengths.

# Vervet monkeys enjoy a mostly vegetarian diet.

Leaves and young shoots are most important in the vervet diet, but bark, flowers, fruit, bulbs, roots, and grass seeds are also consumed. Their mainly vegetarian diet is supplemented with insects, grubs, eggs, baby birds, and sometimes rodents and hares. Vervets rarely drink water.

#### They adhere to a strict hierarchy.

Vervet society is built on complex but stable social groups (called troops) of 10 to 50 individuals —mainly adult females and their immature offspring. There is a strict social hierarchy among troop members. Males transfer troops at least once in their lifetime, beginning at puberty. This is a dangerous process, not only because of the predators they may encounter in transit, but also because troops dislike immigrants.

The hierarchical system controls feeding, mating, fighting, friendships, survival, and even grooming—an important part of the vervet's life. They spend several hours each day removing parasites, dirt, and other materials from one another's fur. In the hierarchy, dominant individuals receive the most grooming.

# Infants are cherished in vervet society.

The newborn has black hair and a pink face, and it takes three or four months before it acquires adult coloration. The infant spends the first week of life clinging to its mother's stomach. After about the third week, it begins to move about by itself and attempts to play with other young monkeys. Infants are of great interest to the other monkeys in the troop; subadult females do everything possible to be allowed to groom or hold a new infant. Researchers report that usually a female's close family members will have the most unrestricted access to the babies. As the infants grow, they play not only with monkeys, but also with other young animals.

# CHEETAHS

### 1. <u>http://animals.nationalgeographic.com/animals/mammals/cheetah/</u>

world's fastest land mammal (1) can go from 0 to 60 miles (96 kilometers) an hour in only three seconds. (1)

use exceptionally keen eyesight to scan their grassland environment for signs of prey(1)

When the moment is right a cheetah will sprint after its quarry and attempt to knock it down. Such chases cost the hunter a tremendous amount of energy and are usually over in less than a minute. (1)

Cheetahs need only drink once every three to four days.(1) have a litter of three cubs and live with them for one and a half to two years. (1)

Male cheetahs live alone or in small groups, often with their littermates. (1)

#### 2. http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-cheetah.cfm

Their coats are golden or yellowish, embellished with many small black spots, and their tails are long with a few black bands and sometimes a white tip (2) Black stripes run from their eyes down to the corners of their mouths (2) grow to between three and a half and four and a half feet long, not including their 30-inch tails. They weigh between 75 and 145 pounds and stand two to three feet tall at the shoulder. (2)

Savannas, both open and more densely vegetated, give cheetahs the open areas they need for quick stalks and chases. They are not found in forest areas or wetlands.

Females reach breeding age by 21 or 22 months of age. Males live in small permanent groups called coalitions, which are usually made up of brothers. Males are drawn to females in heat, but only one male in a coalition usually mates with the selected female. On average, three cubs are born about three months after mating takes place. Until five or six weeks old, the cubs remain hidden; if she needs to move, the mother carries them from place to place. After five or six weeks, cubs follow their mothers and share her kills. Cheetah cubs wean at about three months old. (2)

Female cheetahs live alone, except when raising cubs. They rarely associate with other cheetahs, except when ready to mate. Males live in small permanent groups called coalitions, which are usually made up of two to four brothers. (2)

To avoid lions and leopards, cheetahs usually hunt in the middle of the day. Cheetahs stalk their prey, approaching to within about 50 feet before dashing out from cover and sprinting at the targeted animals. Cheetahs grab their victims' throats and suffocate their quarry within a few minutes. (2)

their kills are often stolen by larger predators and picked at by hordes of vultures. Lions and hyenas also eat cheetah cubs; lions and leopards also kill adults. (2) A sprinting cheetah can reach 45 miles per hour within 2.5 seconds. Top speed—up to 64 miles per hour—can only be briefly sustained. (2)

n the 16th century, emperors and other royalty hunted gazelles with trained cheetahs. (2)

#### 3. https://www.awf.org/wildlife-conservation/cheetah

Cheetahs have long, slim, muscular legs; a small, rounded head set on a long neck; a flexible spine; a deep chest; special pads on its feet for traction; and a long tail for balance. (3)

It is also the only cat that cannot retract its claws, an adaptation to help maintain traction like a soccer player's cleats. (3)

It also bears distinctive black "tear tracks" running from the inside corner of each eye to the mouth, which may serve as an anti-glare mechanism for daytime hunting. (3)

The cheetah is a fast but timid predator. (3)

The cheetah gets as close to the prey as possible, then in a burst of speed, it tries to outrun its quarry. Once the cheetah closes in, it knock s the prey to the ground with its paw and suffocates the animal with a bite to the neck (3)

lions, leopards, hyenas, vultures, and jackals will steal from this timid predator. (3)

basically a solitary animal. (3)

Cheetah mothers spend a long time teaching their young how to hunt. Small, live antelopes are brought back to the cubs so they can learn to chase and catch them.(3)

# 4. http://cheetah.org/about-the-cheetah/for-kids/

The cheetah is the world's fastest land animal. They can run 70 mph (or 110 kph), which is as fast as cars drive on the highway. The cheetah can reach its top speed in just 3 seconds! (4)

The tail almost functions like a rudder on a boat because they use it to help control their steering and keep their balance when running very fast. (4)

The pads of most cats' paws are soft, but the cheetah's pads are hard kind of like the rubber on a tire. This also helps them grip the ground when they are running so fast. (4)

"tear marks" that run from the inside corners of their eyes down to the outside edges of their mouth. These marks help reflect the glare of the sun when they are hunting during the day. (4)

The cheetah's fur is covered in solid black spots, and so is their skin! (4)

When cheetahs are running full speed, their stride (length between steps) is 6-7 meters (21 feet). Their feet only touch the ground twice during each stride. (4)

They usually chase down their prey and then bite its throat, killing it by cutting off its air supply (suffocation). (4)

Cheetah cubs have long tall hair that runs from their neck all the way down to the base of their tail, which is called the mantle. The mantle makes a cheetah cub look like a honey badger and makes them blend into tall grass, which helps keep them safe from threats like lions and hyenas. (4)

A mother cheetah usually cares for anywhere from 2 to 8 cubs per litter, but cubs are often the target of other predators and many do not survive past the first year. (4)

# 1. http://kids.nationalgeographic.com/animals/lion/

lions are family animals and truly social in their own communities. They usually live in groups of 15 or more animals called prides. Prides can be as small as 3 or as big as 40 animals. In a pride, lions hunt prey, raise cubs, and defend their territory together. In prides the females do most of the hunting and cub rearing. Usually all the lionesses in the pride are related—mothers, daughters, grandmothers, and sisters. (1)

A cub may nurse from other females as well as its mother. Each pride generally will have no more than two adult males. (1)

males often stay for only two to four years. After that they go off on their own or are evicted by other males who take over the pride. When a new male becomes part of the pride it is not unusual for him to kill all the cubs, ensuring that all future cubs will have his genes. The main job of males in the pride is defending the pride's territory. A male's loud roar, usually heard after sunset, can carry for as far as five miles (1)

Hunting generally is done in the dark by the lionesses. They often hunt in groups of two or three, using teamwork to stalk, surround, and kill their prey.(1)

After the kill the males usually eat first, lionesses next-and the cubs get what's left.(1)

# 2. http://animals.nationalgeographic.com/animals/mammals/african-lion/?source=A-to-Z

Prides are family units that may include up to three males, a dozen or so females, and their young. All of a pride's lionesses are related, and female cubs typically stay with the group as they age. Young males eventually leave and establish their own prides by taking over a group headed by another male. (2)

Males defend the pride's territory, which may include some 100 square miles (259 square kilometers) of grasslands, scrub, or open woodlands. (2)

mark the area with urine, roar menacingly to warn intruders, and chase off animals that encroach on their turf. (2)

Female lions are the pride's primary hunters. They often work together to prey upon antelopes, zebras, wildebeest, and other large animals of the open grasslands. Many of these animals are faster than lions, so teamwork pays off. (2)

Lions will hunt alone if the opportunity presents itself, and they also steal kills from hyenas or wild dogs. (2)

### 3. http://nationalzoo.si.edu/animals/greatcats/lionfacts.cfm

Lions have strong, compact bodies and powerful forelegs, teeth, and jaws for pulling down and killing prey. Their coats are yellow-gold. Adult males have shaggy manes that range in color from blond to reddish-brown to black, and length. The length and color of the mane is believed

to be determined by such factors as age, genetics, and hormones. Young lions have light spotting on their coats that will disappear as they grow up. (3)

Male lions grow larger than females, reaching up to ten feet long (females reach up to nine feet long), plus a two- to three-foot-long tail. Male lions weigh from 330 to 550 pounds; females weigh 265 to 395 pounds. Lions stand between three and a half and four feet tall at the shoulder. (3)

Lions eat primarily large animals, such as zebra and wildebeest, weighing from 100 to 1,000 pounds. In times of shortage, they also catch and eat a variety of smaller animals from rodents (3)

Lions steal kills from hyenas, leopards, and other predators, but may also lose their catches to hyena groups. (3)

Female lions usually give birth to a litter every two years.(3)

Females give birth to one to six cubs after a gestation of about three and a half months. Cubs nurse for six months, but start eating meat at three months. Due to varied dangers, including starvation during times of food shortage and attacks by male lions taking over prides, 60 to 70 percent of lion cubs die within their first two years of life.(3)

Male lions in the wild live about 12 years; females live about 15 years.(3)

Females stay in their mothers' prides for life,(3)

Young males are driven from their prides when they grow large enough to compete with the dominant males. (3)

Males entering a new pride will kill all cubs that cannot run from them. (3)

Males take on most of defense duties, however, both males and females will mark their territories by roaring and scent marking (urine). (3)

Nomadic males must hunt alone or scavenge from other animals.

### 4. http://animals.sandiegozoo.org/animals/lion

Prime habitat for lions is open woodlands, thick grassland, and brush habitat where there is enough cover for hunting and denning. These areas of grassland habitat also provide food for the animals lions prey upon. (4)

The color, size, and abundance of the mane all vary among individuals and with age. The mane's function is to make the male look more impressive to females and more intimidating to rival males. The lion's thick mane also protects his neck against raking claws during fights with other males over territory disputes or breeding rights. (4)

In dry areas with less food, prides are smaller, with two lionesses in charge. In habitats with more food and water, prides can have four to six adult lionesses. Both males and females scent mark to define their territory. (4)

Hunting as a group means there is a better chance that the lions have food when they need it, and it is less likely that they will get injured while hunting. (4)

Being smaller and lighter than males, lionesses are more agile and faster. During hunting, smaller females chase the prey toward the center of the hunting group. The larger and heavier lionesses ambush or capture the prey. Lionesses are versatile and can switch hunting jobs depending on which females are hunting that day and what kind of prey it is. (4)

While they do eat more than the lionesses and bring in far less food (they hunt less than 10 percent of the time), (4)

Males also guard the cubs while the lionesses are hunting, and they make sure the cubs get enough food. (4)

Over the course of 24 hours, lions have short bursts of intense activity, followed by long bouts of lying around that total up to 21 hours! Lions are good climbers and often rest in trees, perhaps to catch a cool breeze or to get away from flies. (4)

Males are able to roar when they are about one year old, and females can roar a few months later. (4)

Other sounds lions produce include growls, snarls, hisses, meows, grunts, and puffs, which sound like a stifled sneeze and is used in friendly situations. (4)

Lions usually hunt at night, particularly

at dusk and dawn, with lionesses doing most of the work. A lion chasing down prey can run the length of a football field in six seconds. Their eyes have a horizontal streak of nerve cells, which improves their vision following prey across a plain. Lions have been spotted taking down animals as large as buffalo and giraffes! They may even drag this heavy prey into thickets of brush to keep other animals from getting to it. (4)

Lions hunt antelope and other hoofed animals, baby elephants or rhinos, rodents, reptiles, insects, and even crocodiles. They also scavenge or steal prey from leopards, cheetahs, hyenas, or wild dogs, even eating food that has spoiled. Lions digest their food quickly, which allows them to return soon for a second helping after gorging themselves the first time. (4)

A lioness gives birth to her cubs in a secluded location away from the pride. At birth, each cub's coat is yellowish brown and marked with distinct dark, rosette-shaped spots or, sometimes, stripes. Cubs remain hidden for four to six weeks as they gain strength, learn to walk, and play with one another and their mother. When they return to the pride, they can nurse from any adult lioness in the pride, not just their own mother. In fact, the females in a pride often give birth around the same time, which makes for lots of playmates! (4)

if a new adult male takes over the pride, he may kill cubs under one year old so that (4)

At three months old, cubs are able to follow their mother wherever she goes, and they are weaned by the age of six months. At about one year old, males start to get fuzz around their neck that grows into the long mane adult male lions are famous for. (4)

Mothers generally raise males until they are just about two. (4)

Lions that do not live in prides are called nomads, (4)

## HYENAS

### 1. http://animals.nationalgeographic.com/animals/mammals/hyena/?source=A-to-Z

Spotted hyenas are famed scavengers and often dine on the leftovers of other predators. (1)

will take down wildebeest or antelope. They also kill and eat birds, lizards, snakes, and insects. (1)

Spotted hyenas have good hearing and sharp eyesight at night. They are fast and can run for long distances without tiring. (1)

Packs work together effectively to isolate a herd animal, sometimes one that is ill or infirm, and pursue it to the death. (1)

The victors often squabble over the spoils, either among themselves or with other powerful animals like lions.(1)

Spotted hyenas are quite vocal and make a wide variety of sounds, including the "laughing" that has long been associated with their name.(1)

### 2. http://animals.sandiegozoo.org/animals/spotted-hyena

the spotted hyena is more closely related to cats, civets, and genets. (2)

The spotted hyena's paws have four toes with non-retractable claws.(2)

Its only true predators are lions and humans.(2)

Hyenas use watering holes as places to cool off or to hide extra food. Spotted hyenas can be active both day and night, depending on their needs and whether there are humans around, but they are generally nocturnal. (2)

Lions and hyenas compete over the same food in overlapping territories. Sometimes the hyenas do the work of organizing, chasing down, and killing prey only to have lions steal it. Lions often injure or kill hyenas as they fight over a carcass. Both hyenas and lions mark and establish territories, and both species are always on guard. When confronted by a lion, the spotted hyena calls for help from other hyenas. (2)

They eat practically every part of the animal, including skin, hooves, bone, and teeth. (2)

Spotted hyenas do scavenge, but they have to compete with jackals and vultures for these leftovers. In a large group, spotted hyenas are able to chase lions away from a kill. But during a hunt, the hyena's impressive hunting skills come into play. They are able to chase down prey over long distances while running at up to 37 miles per hour (60 kilometers per hour). (2)

Spotted hyenas often pick out the young or weak from the herd, but they can kill even healthy adults of many hoofed species. (2)

The bigger the hyena clan, the larger its prey. This can include young rhinos, adult wildebeest, zebras, and Cape buffalo.(2)

young hyenas take years to become successful. Smaller packs chase down gazelles, impalas, warthogs, and waterbucks. (2)

When hunting alone, a spotted hyena may go after smaller prey. Ground birds, rabbits, springhare, bat-eared foxes, porcupines, jackals, and fish can be on the menu. Even ostrich eggs are fair game!(2)

Spotted hyenas have distinctive vocalizations. In fact, they are the most vocal mammals in Africa, with over 11 different sounds that researchers have recorded. The famous giggle they produce sounds like a human laughing. This "laugh" is used during times of nervous excitement or submission to a dominant hyena. The "whoop" is a call heard for miles and is used to find cubs, advertise territory, or bring the clan together. Spotted hyenas can tell which individual makes the whoop. Groans and squeals are used to greet each other. Other sounds include grunting and growling. Hyenas also use their calls and scent marks to claim their territory. (2)

Adult females give birth to cubs in isolated dens and later move their cubs to "kindergarten" in communal dens, which are holes previously dug by other animals such as aardvarks. Life starts out rough for a young hyena cub. The average litter has two cubs, and the competition between them starts right away. Cubs are born with dark fur, their eyes open, and some teeth already present. They fight over who will be the dominant one and nurse first, sometimes killing their weaker sibling. (2)

At two to six weeks of age, the mother moves the cubs to a den shared by other mothers in the same clan and their young. Although there may be many cubs from different mothers, each mother nurses just her own.(2)

The young continue to nurse until about one to two years old. Females stay with their birth clan, but the males leave upon maturity at around age three, if not sooner. Half of all spotted hyena young die before they reach maturity. (2)

They are often vilified and misrepresented as foolish and treacherous, even downright vicious and evil. It's a reputation that these intelligent, resourceful, and efficient creatures do not deserve. (2)

# 3. http://www.bioexpedition.com/spotted-hyena/

They have sharp teeth and when they move their lips they often look like they are smiling which further adds to the image that they are laughing. They have a very good sense of hearing and excellent vision.(3)

The Spotted Hyena is a carnivore and they will hunt as well as consume food that has been left by other predators. They often consume what others left behind because they have teeth that

allow it to be able to get through bones and other tough materials that those other hunters had to leave behind. They also have a digestive system that enables them to consume food that has been left rotting in the hot sun.(3)

They will get several members to confuse the herd while others are focused on the target of prey that they plan to take down. (3)

They can also hunt on their own for rodents, reptiles, birds, and insects. (3)

Mating can occur for the Spotted Hyena during any time of the year. As long as they have habitat and food they will do so. (3)

After mating has occurred the gestation period is about 110 days. The females will find an abandoned den where they can call home in the weeks before they give birth. It isn't uncommon for several females and their young to all be found in the same den. She may have from 2 to 4 per litter. They can live up to 25 years in the wild. (3)

# GAZELLE

### 1. http://animals.nationalgeographic.com/animals/mammals/gazelle/

These grazing antelopes live in herds, which can consist of as few as ten or as many as several hundred animals. During the plentiful rainy season, thousands of animals can be seen gathering in large groups. (1)

typically frequent wide-open spaces and plains, where they browse on grasses, shoots, and leaves.(1)

Open plains make them visible to predators like cheetahs or wild dogs, but gazelles are fleet of foot. The Thomson's gazelle can reach speeds of 40 miles (64 kilometers) an hour.(1)

After a pregnancy of about six months, female gazelles give birth to one or two young and hide them in the plains grasses. These infants will remain out of sight for days or even weeks, being periodically nursed by their mother, until they are old enough to join the mother's herd, in the case of females, or a bachelor herd.(1)

#### Habits

Gazelles rely on their speed to escape from predators. Gazelles can reach speeds up to 60 mph in short bursts and sustain speeds of 30 to 40 mph. When running, gazelles use a bounding leap, called "pronking" or "stotting," which involves stiffly springing into the air with all four feet. (1)

Female Thomson's gazelles, for example, live in herds of 10 to 30 females in addition to their young. Males live alone or in small groups with other males. A male herd is called a bachelor's herd. The segregation of herds is more prominent during mating season.(1)

Mating season is usually timed to occur during the rainy season so that the newborn fawns will have plenty to drink.(1)

Gazelles carry their young for around six months before giving birth. They have one to two young at a time. Baby gazelles are called fawns or calves. (1)

To keep her calves safe from predators, a female gazelle will hide her babies in tall grasses. While the young are still nursing, they stay with their mother's herd. When they are ready to fend for themselves, male calves are moved to the male herd. Gazelles typically live 10 to 12 years. (1)

A gazelle will flick its tails or stomp its feet to warn others of a lurking predator.(1)

Gazelles can stand on their back legs to reach leaves high in the branches of trees. (1)

### 2. http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-dama.cfm

This gazelle may have a shoulder height of nearly four feet. Its head and body length may range from four and a half to five and a half feet, and its tail may be up to a foot long. Adults may weigh 88 to 165 pounds. (2)

They may lead a solitary life or live in a group of up to 15 individuals. (2)

Dama gazelles may stand on their hind legs to eat from acacia trees and other plants as high as six feet from the ground. (2)

#### 3. http://www.outtoafrica.nl/animals/enggrantsgazelle.html

Grant's gazelles are especially fond of open grass plains, and although they frequent bushy savannas, they avoid areas of high grass. (3)

The gazelles vary their diet according to the season. They eat herbs, foliage from shrubs, short grasses and shoots. Grant's gazelles are not restricted to certain habitats by a dependency on water, but obtain the moisture they need from their food. (3)

The fawn eats its first solid food at about 1 month, but is nursed for 6 months. Grant's become mature at about 18 months. (3)

All the major predators kill Grant's gazelle, but cheetahs and African hunting dogs are the most prevalent. (3)

The only relatively long-lasting relationship in gazelle society is that of a mother and her most recent offspring. (3)

# ZEBRA

# 1. http://animals.nationalgeographic.com/animals/mammals/zebra/

No animal has a more distinctive coat than the zebra. Each animal's stripes are as unique as fingerprints—no two are exactly alike—although each of the three species has its own general pattern. (1)

The patterns may make it difficult for predators to identify a single animal from a running herd and distort distance at dawn and dusk. (1)

Zebras are social animals that spend time in herds. They graze together, primarily on grass, and even groom one another. (1)

They live in small family groups consisting of a male (stallion), several females, and their young. (1)

Zebras must be constantly wary of lions and hyenas. A herd has many eyes alert to danger. If an animal is attacked, its family will come to its defense, circling the wounded zebra and attempting to drive off predators. (1)

#### 2. http://animals.sandiegozoo.org/animals/zebra

members of the horse family.(2)

excellent hearing and eyesight and can run at speeds of up to 35 miles per hour (56 kilometers per hour) (2)

powerful kick that can cause serious injury to a predator, like a lion, a hyena, or an African wild dog. Usually the lead male of the herd, called a stallion, sounds the alarm if danger is spotted and stays at the back of the group to defend against predators if necessary, while the mares (females) and foals (youngsters) run away. (2)

Their hard hooves are designed to withstand the impact of their body weight and to run easily over rocky ground. When resting at night, zebras lie down while one stands watch to prevent an ambush. (2)

When zebras are grouped together, their combined stripes make it hard for a lion or leopard to pick out one zebra to chase. Zebra stripes are unique to each individual, and researchers in the field have used zebras' individual stripe patterns for identification. (2)

feed mostly by grazing on grasses, although they also might browse a bit on the leaves and stems of bushes. They graze for many hours each day, using their strong front teeth to clip off the tips of the grass. Their back teeth then crush and grind the food. Spending so much time chewing wears the teeth down, so those teeth keep growing all their lives. (2)

As the dry season arrives and the grasses die back, zebra herds travel to find more food and water holes for drinking. (2)

Plains and mountain zebras are social herd animals, living in family groups with a stallion, several mares, and their offspring. During certain times of the year, these groups gather together to form loosely associated herds of up to several hundred, but the family groups still stay together within these larger groups.(2)

Zebras communicate with one another with facial expressions and sounds. (2)

The position of their ears, how wide open their eyes are, and whether their mouths are open or their teeth are bared all mean something. Ears flat back, for example, means trouble, or you better follow orders! (2)

Zebras also reinforce their bonds by grooming each other. You might see two zebras standing head to back, apparently biting each other, but they are really only nibbling on each other with their teeth to pull out loose hair and get a good scratch. (2)

Zebra foals have soft, fuzzy fur, and their stripes are usually brown and white at first. Their legs are already almost as long as an adult zebra's and they can walk just 20 minutes after birth and can run after an hour! (2)

Foals must be able to recognize their mother from birth in order to survive. A foal learns its mother's stripe pattern in order to follow her. (2)

Once the foal can readily identify its mother, the mare and her foal return to the herd for protection. (2)

### 2. http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-gzebra.cfm

Grevy's zebras grow up to nine feet long, weigh up to 990 pounds, and stand up to almost five and a half feet at the shoulder. On average, males are about ten percent larger than females. (2)

Grevy's zebras usually mate in August, September, and October, and bear foals during the rainy seasons. After mating, females give birth to a single foal 13 months later. Foals nurse heavily for half a year and may travel with their mothers for three years. Groups of females with young form herds of up to 200 animals. (2)

Males are highly territorial, claiming prime watering and grazing areas with piles of dung called middens. They generally live alone in their territories, except when females move through during mating season. Non-territorial males travel together in groups of two to six animals. This social system differs from that of other zebras, which typically form female harems that live in one male's territory all year. During dry months, many Grevy's zebras migrate to greener mountain pastures, but males on prime territories often remain there year-round (2)

### WILDEBEEST

### 1. <u>http://animals.nationalgeographic.com/animals/mammals/wildebeest/</u>

gnu (1)

ource of food for the truly menacing predators of the African savanna: lions, cheetahs, wild dogs, and hyenas. (1)

Gnus can reach 8 feet (2.4 meters) in length, stand 4.5 feet (1.4 meters) tall at the shoulders and weigh up to 600 pounds (272 kilograms). Both males and females grow horns. (1)

grassy plains and open woodlands of central, southern, and eastern Africa, particularly the Serengeti in Tanzania and Kenya. They travel in large herds and are active day and night, grazing constantly.(1)

Their spectacular northward migration in search of greener pastures is dictated by weather patterns, but usually takes place in May or June. It is considered one of the greatest wildlife spectacles on Earth, involving up to 1.5 million wildebeests as well as hundreds of thousands of other animals, including zebra and gazelle.(1)

Up to 500,000 calves are born in February and March each year, at the beginning of the rainy season. Calves learn to walk within minutes of birth and within days are able to keep up with the herd. Gnus can live to be 20 years old. (1)

### 2. http://www.outtoafrica.nl/animals/engwildebeest.html

The head of the wildebeest is large and box-like. Both males and females have curving horns, that are close together at the base, but curve outward, inward and slightly backward. The body looks disproportionate, as the front end is heavily built, the hindquarters slender and the legs spindly.(2)

plains and acacia of eastern Africa (2)

In the Serengeti-Mara ecosystem the animals make a migratory circle each year of 500 to 1,000 miles. The migration starts after the calving season in January and February on the short grass plains in the southeastern Serengeti. Wildebeests move west toward Lake Victoria, across the grass savanna to the open woodlands, then turn north into the Mara. They then begin the return trip to the south. They are relentless in their advance and will swim rivers and lakes in such huge masses that many are injured, lost (especially in the case of calves) or killed.(2)

Wildebeest are continually on the move as they seek favorable supplied of grass and water. Active both day and night, they often string out in long single columns when on the move. They also cover long distances at a slow rocking gallop but can run fast when necessary. Zebras and Thomson's gazelles, and some of their many predators, accompany the migrating wildebeests. (2)

When neighboring bulls meet at the edges of their territories they go through a highly ritualized "challenge" in which they paw the ground, buck, snort and fight. They typical combat position in on their knees, facing one another, with their foreheads flat on the ground – they knock heads and hit at the base of the horns but seldom injure one another.(2)

wildebeest prefer short grass. They are unable to go without water for more than a few days.(2)

give birth to a single calf in the middle of the herd, not seeking a secluded place, as do many antelopes. Amazingly, about 80 percent of the females calve within the same 2- to 3- week period, creating a glut for predators and thus enabling more calves to survive the crucial first few weeks. A calf can stand and run within minutes of birth. It immediately begins to follow its mother and stays close to her to avoid getting lost or killed by waiting predators. Within days, it can run fast enough to keep up with the adult herd.(2)

#### 3. http://www.bioexpedition.com/wildebeest/

The body of this animal is very large and stocky. They have powerful hooves that are designed to allow them to go over rugged terrain. They also prevent the animal from slipping or sliding in the mud. They are a dark black with stripes. They have horns that are curved to help them have protection from enemies. The back end of the body closely resembles that of an ox.(3)

Along the plains and open woodlands of Africa (3)

The drought can determine when they will head along those migrational routes. These routes are often from 500 to 1,000 miles.(3)

Typically, it is the young and the sick that are more vulnerable. They also stay close to Zebras and it is believed that it also helps to offer them more protection. (3)

They also share alarm calls when there could be a predator out there.(3)

These animals have lookouts that help to protect the herds. They will make noise and run when there is a risk, and that encourages all of them to run. Most predators won't go after a healthy Wildebeest as a kick from one of them could severely injure or kill that predator. The herds of Wildebeest can be from 150 to many thousands of them.(3)

They may divide up if they are having trouble finding enough food. By branching off in smaller herds they increase the overall chances of survival. (3)

Grass, shrubs, herbs, and plants are the diet of the Wildebeest. They don't stay in one place to eat. Instead, they graze around a very large migrational route. They will move along based on food availability, water or drought production, and even predators that may be in a given location. (3)

The males will be very entertaining for the females they wish to mate with. In fact, they are nicknamed the clowns of the savanna for this reason.(3)

The mother will give birth to the young about 8 to 9 months later. All of the young in a herd are born within a 3 week window (3)

#### Vervet Monkey

#### 1. http://a-z-animals.com/animals/vervet-monkey/Vervet Monkey Classification and

medium to large sized monkey (1)

Their fur tends to be grey or olive in colour (depending on the species) and is lighter on their underside. The hands and feet of the Vervet Monkey are black, along with their ears and face which has a white band above it and is also framed by white cheek tufts. The Vervet Monkey has long arms and legs which are about the same length to allow this species to walk on all fours when on the ground with ease, and actually makes them quite speedy when running. (1)

The Vervet Monkey is an arboreal monkey which means that it spends most of it's time in the safety of the trees. Although they do venture down to the ground in search of both food and water, (1)

They are diurnal animals spending the days foraging for food and then rest at night. (1)

troops that can contain between 10 and 50 individuals, depending on the location and how ample the food supply is. These troops are comprised of adult females and their young, with males wandering between different troops to both socialise and mate. (1)

After about 5 and a half months, females give birth to a single infant which is cleaned by it's mother at birth, and clings to her stomach during the first week or so. Vervet Monkey babies quickly develop strong social bonds with other monkeys and are known to begin interacting and playing with them by the time they are a month old. They have pink faces and black fur and don't tend to develop their adult colouration until they are a few months old. Vervet Monkey offspring suckle on their mother's milk until they are nearly four months old and start to eat softer vegetation, but they are not fully weaned until they are about a year old. (1)

tree bark, flowers and fruits that can also be found in the trees surrounding them. On the ground Vervet Monkeys forage for roots, bulbs, seeds and grasses and are also known to supplement their diet with insects, eggs, rodents, birds and other small animals. (1)

On the ground however, they are preyed upon by a number of Africa's large predators including felines like the Leopard, Serval and Caracal, along with large reptiles such as Pythons, and Crocodiles close to water. (1)

Younger females in the troop that are not yet mature, often show a keen interest in the offspring of adult females and assist them with grooming and caring for their young. (1)

#### https://www.awf.org/wildlife-conservation/vervet-monkey

acacia woodland along streams, rivers, and lakes. (2)

There are several subspecies of vervet monkeys, but, generally, the body is a greenish-olive or silvery-gray. The face, ears, hands, feet, and tip of the tail are black, but a conspicuous white band on the forehead blends in with the short whiskers. (2)

its arms and legs are approximately equal lengths. (2)

Leaves and young shoots are most important in the vervet diet, but bark, flowers, fruit, bulbs, roots, and grass seeds are also consumed. Their mainly vegetarian diet is supplemented with insects, grubs, eggs, baby birds, and sometimes rodents and hares. Vervets rarely drink water. (2)

There is a strict social hierarchy among troop members. Males transfer troops at least once in their lifetime, beginning at puberty. This is a dangerous process, not only because of the predators they may encounter in transit, but also because troops dislike immigrants. (2)

They spend several hours each day removing parasites, dirt, and other materials from one another's fur. In the hierarchy, dominant individuals receive the most grooming. (2)

Infants are of great interest to the other monkeys in the troop (2)

# CHEETAHS

- 1. http://animals.nationalgeographic.com/animals/mammals/cheetah/
- 2. http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-cheetah.cfm
- 3. https://www.awf.org/wildlife-conservation/cheetah
- 4. http://cheetah.org/about-the-cheetah/for-kids/

## DESCRIPTION

World's fastest land mammal (1) 0-60 mph in 3 seconds (1)(4) Gold-yellow coat. small black spots. (2) Long tails. black bands. Sometimes white tip. (2) 3.5-4' long. 30" tail. 2.5-3' tall (2) weight 75-145lbs. (2) are very fast but can't hold that speed for very long. (2) fur and skin both are covered in black spots (4)

HABITAT Savannas - good for hunting. (2)

### SPECIAL FEATURES

keen eyes to scan grasslands for prey (1)

need water only once every three to four days (1)

black stripes from corner of eyes down to corner of mouth (2)(3)Black stripe may be anti glare (3)(4)

use tail for balance (3) (4) can't retract (pull back) their claws—like cleats on a baseball field, let them hold traction onto the ground (3)(4)

WHAT THEY EAT small gazelles, antelopes

#### **BEHAVIOR**

Males live alone or in small groups. (1)(2) groups often made up of other cheetahs from their litter. (1)(2) groups called coalitions(2)

females live alone unless raising cubs.(2)

## WHO ARE THEIR PREDATORS

Lions, hyenas eat cubs. lions and leopards can kill adults ((2)

#### HOW THEY HUNT

Once have gotten close enough to quarry, sprint and knock it down (1)

Chases cost lots of energy. (1) Chases over in less than a minute (1) Can't hold speed for very long. (2)

quick stalks and chases (2) hunt in middle of the day because lions hunt at dawn and at dusk (2) stalk and get about 50' from prey then spring and chase their target (2) suffocate prey by grabbing them by the throat (2)(4) knocks prey to ground (3) bites the neck (3) lions, hyenas and vultures often steal cheetah's prey (2) (3)

cheetah mothers spend a long time in hunting lessons for cubs. Bring them small, live antelopes for them to practice on. (3)

When cheetahs are running full speed, their stride (length between steps) is 6-7 meters (21 feet). Their feet only touch the ground twice during each stride. (4)

### **BABIES**

three cubs.(1)(2) three to eight cubs but most don't survive past first year due to predators (4) until five or six weeks old, mother hides cubs. Carries them from place to place (2) Able to walk after 5-6 weeks(2) weaned at 3 months. (2)

Cubs stay with mom 1.5 to 2 years (1)

# LION

- 1. http://kids.nationalgeographic.com/animals/lion/
- 2. http://animals.nationalgeographic.com/animals/mammals/african-lion/?source=A-to-Z
- 3. http://nationalzoo.si.edu/animals/greatcats/lionfacts.cfm
- 4. http://animals.sandiegozoo.org/animals/lion

# DESCRIPTION

Lions have strong, compact bodies and powerful forelegs, teeth, and jaws for pulling down and killing prey. Their coats are yellow-gold. Adult males have shaggy manes that range in color from blond to reddish-brown to black, and length. The length and color of the mane is believed to be determined by such factors as age, genetics, and hormones. Young lions have light spotting on their coats that will disappear as they grow up. (3)

Male lions grow larger than females, reaching up to ten feet long (females reach up to nine feet long), plus a two- to three-foot-long tail. Male lions weigh from 330 to 550 pounds; females weigh 265 to 395 pounds. Lions stand between three and a half and four feet tall at the shoulder. (3)

Mane varies from lion to lion and changes as they get older(4) Mane makes them look ferocious(4) Mane protects neck during fights (4) Mane starts growing at about age six months (4)

lionesses are faster and more agile (4)

<u>HABITAT</u> Open woodlands, and high grasses where they can hide. (4)

# WHAT THEY EAT

Antelope, gazelles, widebeest, zebras, (other animals with hooves), baby elephants, baby rhinos, also reptiles, rodents, or even giraffes and cape buffaloes. (4)

# **BEHAVIOR**

Live in social communities called prides.(1) Groups of 15 or more but can be as small as 3 and as large as 40 lions (1) When food is scarce, prides are smaller(4) Females do most hunting and raise cubs. (1) Females stay in pride for life (3) Lionesses in pride are related (1) (2) Prides have about 2 adult males (1) Up to three males (2) Males stay in pride for 2-4 years. (1) (3) (4) Younger lions try to take prides from older lions (1) When new lion takes over pride, kills all young cubs so "all future cubs will have his genes" (1) (3) (4) Kill cubs that can't get away (3) Males' job is to defend pride (1) (2) Pride territory can be as big as 100 square miles (2) Use roar —can carry five miles (1) Mark territory with urine and roars (2)(4) Males on their own are called nomads (3) Nomads must hunt for themselves (3)

Sleep about 21 hours in a day. (4) Sometimes go up trees to rest (4)

# SOUNDS

Roars, Other sounds lions produce include growls, snarls, hisses, meows, grunts, and puffs, which sound like a stifled sneeze and is used in friendly situations. (4) Use roar —can carry five miles (1) Males can roar at 1 year old, females a bit after that.(4)

WHO ARE THEIR PREDATORS Hyenas and leopards prey on cubs.

# HOW THEY HUNT

Lionesses do most of hunting in pride. (1) (2) Hunt in the dark (1) Often hunt in groups (1) Hunt alone if have to (2) When a lion or lioness hunts alone, may go for smaller prey (4) Females take different jobs in hunt-larger ones ambush and capture prey (4) Jobs change depending on the hunt (4) "hunt antelopes, zebras, wildebeest and other large animals" (2) Male lions grow larger than steal kills from other predators (3) hyena's steal their kills (3)

Pecking order in eating-males, then females, then cubs (1)

hide their catch from other predators (4)

### BABIES

have litters every 2 years (3)
Babies nurse 6 months, eat meat at three months (3)
hide babies for four to six weeks until become strong and learn to walk (4)
Many babies do not survive because killed by new males or starvation (3)
mothers give birth at about the same time and cubs nurse from any female, not just mother (1)
(4)
cubs have other cubs their age to play with (2)

## HYENAS

# 1. http://animals.nationalgeographic.com/animals/mammals/hyena/?source=A-to-Z

2. http://animals.sandiegozoo.org/animals/spotted-hyena

# 3. http://www.bioexpedition.com/spotted-hyena/

DESCRIPTION Fast runners, can keep up chase for a long time. (1) Group name is clan (2) Not like we think of them—actually "intelligent, resourceful, and efficient" (2) Have sharp teeth (3) Looks like they're smiling (3) Good eye sight and hearing (3)

# <u>HABITAT</u>

# WHAT THEY EAT

Spotted hyenas are famed scavengers and often dine on the leftovers of other predators. (1) Will take down wildebeest or antelope. They also kill and eat birds, lizards, snakes, and insects. (1)

### **BEHAVIOR**

Cool off in Watering holes and hide food there too. (2) Normally nocturnal, but can be active in day, if need to (2) Has a territory and marks it (2) Females stay in clan where they were born (2)

### SPECIAL FEATURES

Have four toes and claws that do not retract. gives better foothold on soil (2) Their teeth allow them to eat every part of a kill, bones, teeth, skin, etc. (2) (3) Can also eat rotten food (3)

<u>SOUNDS</u> Make many sounds (1) Make laughing sound (1) "Most vocal mammal in Africa" (2) Make 11 different sounds. (2) Use laugh when they're nervous (2) Use "whoop" to get cubs or the clan together, heard over long distances Groans, and squeals used for greeting (2) Use sound to claim territory (2)

WHO ARE THEIR PREDATORS Lions and humans (2)

### HOW THEY HUNT

Work in packs. Isolate an animal from its herd, specially sick or hurt ones and chase it until they can kill it. (1) (2) Also can kill healthy adults (2) If the pack is large, can go after larger prey (2) Lone hyenas hunt smaller animals like rabbits, foxes, porcupines, ground birds (2) (3) Fight over the kill when it's time to eat. (1) Lions may steal their prey (1) (2) Can gang up on lions to prevent them from stealing prey (2) Divide clan to hunt—some confuse the herd while others focus in on the animal they're attacking (3)

BABIES

Females use dens to have babies in isolation(2) Two to six weeks, move to joint dens where many mothers have their babies (2) (3) Use holes dug by other, larger animals like aardvarks (2) (3) Each mother nurses her own. (2) Nurse for about two years (2) Have about two cubs (2) Cubs compete for food and may kill each other. (2)

# GAZELLES

- 1. <u>http://animals.nationalgeographic.com/animals/mammals/gazelle/</u>
- 2. http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-dama.cfm

3. http://www.outtoafrica.nl/animals/enggrantsgazelle.html

### **DESCRIPTION**

Fast, can run up to 40 miles per hour (1)

This gazelle may have a shoulder height of nearly four feet. Its head and body length may range from four and a half to five and a half feet, and its tail may be up to a foot long. Adults may weigh 88 to 165 pounds. (2)

<u>HABITAT</u> Wide open grasslands(1) (3) Avoid high grass (3)

<u>WHAT THEY EAT</u> Grass, leaves and shoots (1) Follow food as they move. (3) Get moisture from their food (3)

### **BEHAVIOR**

Live in herds from 10 to hundreds. (1) (2) In rainy season, when there is a plenty food and water, herds grow to thousands (1) They bound when they run, called prancing or stotting—"springing into the air with all four feet "(1)

Females live in female herds about 15 animals (1) males live alone or in smaller, bachelor herds (1)

Can stand in back legs to reach leaves on tree branches (1)(2) Eat acacia trees (2) Live in herds but don't keep family relationships (3)

### <u>SOUNDS</u>

Stomp their feet to warn of predators and lay their ears back (1)

WHO ARE THEIR PREDATORS All predators on the savanna HOW THEY ESCAPE FROM PREDATORS Use speed. Up to 60 mph bursts, or long time 30-40 mph. (1)

# **BABIES**

Hide babies in grasses. Keep them out of sight for days or weeks, nursing. Until can join the herd (1)

Are born in rainy season so will have lots to drink (1)

Male babies join the bachelor herds when able to take care of itself (1)

Nurse for six months (3)

# ZEBRAS

- 1. http://animals.nationalgeographic.com/animals/mammals/zebra/
- 2. http://animals.sandiegozoo.org/animals/zebra
- 3. http://nationalzoo.si.edu/Animals/AfricanSavanna/Facts/fact-gzebra.cfm

DESCRIPTION Unique stripe pattern for each zebra-like fingerprints. (1)(2) Excellent hearing and eyesight (2) Speed up to 35 mp (2)

<u>HABITAT</u>

WHAT THEY EAT Graze. Eat some stems and leaves (2)

<u>BEHAVIOR</u> Social. Some times in herds. (1)(2) Groom each other (1) Family groups are small — male, several females and their babies (1)(2) Family groups stay together within the herd (2) Move as dry season comes and food in a region becomes scarce -migrates (2) Territorial

S<u>PECIAL FEATURES</u> Hooves made for running on rocky ground. (2) Teeth keep growing because they get worn down chewing on hard grass (2) Groom each other (2)

**COMMUNICATION** 

Change facial expressions and sounds to communicate.

WHO ARE THEIR PREDATORS Lions, hyenas

### HOW THEY ESCAPE PREDATORS

Stripe Pattern can prevent predators from being able to single out one animal from a herd. (1)(2) Strips may make the distance from predator to a herd difficult to gage. (1)

When a predator attacks, other zebras come to rescue victim and try to drive off predator (1)

powerful kick that can cause serious injury to a predator, like a lion, a hyena, or an African wild dog. Usually the lead male of the herd, called a stallion, sounds the alarm if danger is spotted and stays at the back of the group to defend against predators if necessary, while the mares (females) and foals (youngsters) run away. (2)

When they sleep one stays standing up to check for predators (2)

# BABIES

Born in wet season (3) When babies are born, their legs are almost as long as adult legs. Can walk 20 minutes after they're born. Can run 1 hour after they're born. (2) Recognizes mother from her stripes. (2) Don't return to herd until Baby can recognize the mother (2) Nurse for 1.5 years (3)

## WILDEBEEST

- 1. http://animals.nationalgeographic.com/animals/mammals/wildebeest/
- 2. http://www.outtoafrica.nl/animals/engwildebeest.html
- 3. http://www.bioexpedition.com/wildebeest/

DESCRIPTION Gnu is another name (1)

"Gnus can reach 8 feet (2.4 meters) in length, stand 4.5 feet (1.4 meters) tall at the shoulders and weigh up to 600 pounds (272 kilograms). Both males and females grow horns." (1)

"The head of the wildebeest is large and box-like. Both males and females have curving horns, that are close together at the base, but curve outward, inward and slightly backward. The body looks disproportionate, as the front end is heavily built, the hindquarters slender and the legs spindly."(2)

HABITAT Open woodlands and grassy plains.

<u>WHAT THEY EAT</u> Short grass Shrubs, herbs and plants (3)

BEHAVIOR Travel in large herds (1) Herds 150-thousands(3) Active during the day and at night (1) Migration in Serengeti - 1.5 million wildebeests. (1) The migration is between 500-1000 miles long. Follows food.(2)(3) Swim across rivers or lakes on migration (2) Gallop but can run (2) Serengeti Migration-zebras, Thomson's gazelles migrate - predators follow (2) May choose to move where there are less predators (3)

Separate into smaller groups if food is scarce (3)

Bulls challenge each other "in which they paw the ground, buck, snort and fight. They typical combat position in on their knees, facing one another, with their foreheads flat on the ground – they knock heads and hit at the base of the horns but seldom injure one another.(2)

#### SPECIAL FEATURES

Males try to be entertaining their females to get them to mate - clowns (3)

COMMUNICATION Have alarm calls (3)

<u>WHO ARE THEIR PREDATORS?</u> Lions, cheetahs, wild dogs, and hyenas (1)

#### HOW THEY ESCAPE FROM PREDATORS

Mostly it's babies and sick and old wildebeests which can be killed by predators(3) Stay close to zebras (3) Have lookouts (3) Make noise and run when there are predators to show they're healthy(3) Can kick a predator (3)

# <u>BABIES</u>

Born in rainy season (1) Can walk a few minutes after they're born (1) Able to join the herd a few days after born (1)(2) Babies are born in middle of the herd not isolated (2) Most babies are born within 2-3 weeks each year — allows more to survive because predators have lots to pick from. (2) 1 baby each season. (2)

#### Vervet Monkey

#### http://a-z-animals.com/animals/vervet-monkey/Vervet Monkey Classification and

#### DESCRIPTION

medium to large sized monkey (1)

Their fur tends to be grey or olive in colour (depending on the species) and is lighter on their underside. The hands and feet of the Vervet Monkey are black, along with their ears and face which has a white band above it and is also framed by white cheek tufts. The Vervet Monkey has long arms and legs which are about the same length to allow this species to walk on all fours when on the ground with ease, and actually makes them quite speedy when running. (1) (2)

#### <u>HABITAT</u>

acacia woodland along streams, rivers, and lakes. (2)

#### SPECIAL FEATURES

#### WHAT THEY EAT

tree bark, flowers and fruits that can also be found in the trees surrounding them. On the ground Vervet Monkeys forage for roots, bulbs, seeds and grasses and are also known to supplement their diet with insects, eggs, rodents, birds and other small animals. (1)

Leaves and young shoots are most important in the vervet diet, but bark, flowers, fruit, bulbs, roots, and grass seeds are also consumed. Their mainly vegetarian diet is supplemented with insects, grubs, eggs, baby birds, and sometimes rodents and hares. Vervets rarely drink water. (2)

#### **BEHAVIOR**

The Vervet Monkey is an arboreal monkey which means that it spends most of it's time in the safety of the trees. Although they do venture down to the ground in search of both food and water, (1)

They are diurnal animals spending the days foraging for food and then rest at night. (1)

Younger females in the troop that are not yet mature, often show a keen interest in the offspring of adult females and assist them with grooming and caring for their young. (1)

There is a strict social hierarchy among troop members. Males transfer troops at least once in their lifetime, beginning at puberty. This is a dangerous process, not only because of the predators they may encounter in transit, but also because troops dislike immigrants. (2)

They spend several hours each day removing parasites, dirt, and other materials from one another's fur. In the hierarchy, dominant individuals receive the most grooming. (2)

Infants are of great interest to the other monkeys in the troop (2)

#### **COMMUNICATION**

#### WHO ARE THEIR PREDATORS?

On the ground however, they are preyed upon by a number of Africa's large predators including felines like the Leopard, Serval and Caracal, along with large reptiles such as Pythons, and Crocodiles close to water. (1)

### HOW DO THEY ESCAPE PREDATORS?

#### **BABIES**

clings to her stomach during the first week or so (1)

Vervet Monkey babies quickly develop strong social bonds with other monkeys and are known to begin interacting and playing with them by the time they are a month old. (1)

They have pink faces and black fur and don't tend to develop their adult colouration until they are a few months old.(1)

Vervet Monkey offspring suckle on their mother's milk until they are nearly four months old and start to eat softer vegetation, but they are not fully weaned until they are about a year old.(1)

Vervet Monkey

#### Vervet Monkey Day

The sun rises, golden, over the grasslands of the savanna. Its warmth washes over the trees where vervet monkeys spent the night, waking them. Mothers groom their babies. Friends groom each other. Lazy, first one, then another, climb down from their perch, onto the grasslands, looking for breakfast. Before the whole troop is down, one monkey pounces on an unsuspecting bird—a baby, just learning to fly—a tasty snack.

They stroll on all four legs, foraging. On a stand of tall grass which has gone to seed, they pick the seeds, filling their cheek pouches for later. They eat the shoots of young shrubs, just sprouted. They gather under an acacia tree, pick the berries from the seed pods, enjoying an early morning breeze.

But wait. One monkey lifts its head, smelling. Quickly its eyes scan the grass. Black spots! A leopard! Ee-hoo, ee-hoo, ee-hoo, the vervet sounds the alarm. The troop skitters up the tree where the leopard can't pounce to gather its breakfast. Up on the tree they wait, patiently, grooming each other and picking more berries from the branches next to them.

The leopard slinks away. After he's gone and the troop has relaxed and groomed each other as much as they want, the vervets drop down to the ground again to make their way across the savanna. They weave through a herd of zebras wondering toward a stand of marula trees. On the way they pass a pond, a dip filled by the rains. They linger, dipping their hands and toes in the water. Young females play with the babies.

Vervet Monkey

Ccool, on the mud, under the noonday sun... K-chew! K-chew! The alarm call comes from the edge of the water. Five males run toward the call. They mob the python, forcing it away from the playing vervets.

At the marula tree they eat their fill of fallen fruit. So sweet. So juicy. When a midday rain falls they climb the tree to be safe from predators, relax and wait out the storm.

Rambling through the steamy grasslands after the shower, they pick up more seeds, and nuts, and fruit from under trees. If an insect or lizard happens in their path, it often ends up in a monkey's mouth. A shadow passes over them. K-kawh, k-kawh, sounds the alarm. The troop runs, they're fast. Very fast. They run to hide in bushes nearby. The swooping eagle goes away hungry. While they wait for the predator to go away, some of the monkeys reach back into their cheek pouches and snack on the seeds they picked up in the grasses earlier in the morning.

The sun is sinking in the horizon. The grasslands glow pink. the vervet troop climbs into the sleeping trees for the night. They groom each other, and relax. Soft grunts float on the breeze. It's night time on the savanna.