

# Kids' Discovery Clubs

## Overall Objectives

**These child-based, exploratory stations located in 6 areas of the Park provide activities for young Guests and their families at Disney's Animal Kingdom. The objectives are:**

- to connect children (ages 3-8 years old) with the natural world through interactive, exploratory, micro-environments that encourage children to get involved
- to awaken their senses using different learning styles and ensure "family friendly" exhibits
- to embrace strong educational themes that deliver the conservation message: "Care for Wildlife and Wild Places"
- to provide activities for small Guests who are not tall enough to ride all the attractions
- to link each land of the Park with Rafiki's Planet Watch, our conservation center
- to increase Guest capacity in current low capacity areas

### **What should a child's micro-environment include?**

A child's space, or micro-environment, fosters and promotes caring attitudes in young Guests. It integrates play and learning, and focuses on the process of discovery and exploration of the natural world. The design includes activity elements that are at their level, fun, interactive, robust, and discovery-based. Each activity is designed to incorporate the storyline in the individual lands where they are located.

**ADA Guidelines offer Guests with disabilities an opportunity to take an active role in our Kids' Discovery Club activities.**

Be sure to "Place the Guest first, not the disability"

Do not assume a Guest with disabilities cannot participate in certain activities. Direct them the same way you would direct other Guests.

Provide exceptional Guest service by using props, pictures, or other learning tools to preserve the Magical Guest experience.

# Africa



**Level:**  
3-8 Years

**Subject Area:**  
Animal Tracking

**Duration:**  
2-4 Minutes

**Setting:**  
Pangani Forest

**Skills:**  
Information gathering,  
Drawing conclusions

What animal passed this way?  
Can you figure out what it was?

## Summary

Use problem solving skills to discover which animal has passed through the forest.

## Objectives

- To encourage children to use problem solving skills and clues to identify markings left by one particular animal.
- To discover how scientists track animals in the wild.
- To understand that these clues can tell us a lot about wildlife in an area.
- To leave children empowered with the message "Care for Wildlife."

## Materials

- 3 Clue Boards
- Rhino Footprints
- Browse
- Rhino Poop
- Telescope

## Making Connections

Most children are fascinated by the natural world. Helping them connect with nature may spark interest and empower them to make a difference. Through the activity, they will learn that even though they are young they can care for wildlife too.

## Background

You don't always have to actually see an animal to know it's there. Scientists use many different methods to track animals in the wild. For example, they look for visual signs such as foot prints, dung droppings, browsed plant material, nesting sites, etc. Scientists may track animals for a number of different reasons. They may want to find out where the animals live, how many of a particular animal live in a certain area, the distance traveled, or they may be tracking an individual animal.

Tracking is very important when you are studying endangered animals. It's important to know as much about the animals you are studying as possible. Knowing as much as you can about habitats, food supplies, and environmental conditions makes it possible for scientists to help species and ensure their survival.

## Procedure

### Warm Up

Ask children if they have ever seen animal prints on the ground. What could they tell by looking at those prints? What type of animal it is? How big it is? Briefly discuss how scientists use clues like footprints to find and track animals in the wild.

### The Activity

- Step 1.** Tell the children that they are going to track an animal. An animal has passed through the forest. We need their help to discover what it was. Lead them to clue 1. Tell them that an animal has left something behind. What do they think that it is? Refer to the clue board. How many toes does it have?
- Step 2.** Proceed to the second clue. Ask the children if they have any idea what they found on the ground there. What does it have in it? How did it get there? Once they have discovered that it is poop, ask a few more questions. Is it small or large? What do you think the animal ate? Why would scientists want to study poop?
- Step 3.** Now comes the time to solve the puzzle. They have seen both clues. They know what the footprints look like and what the poop looks like. The poop can even tell them if the animal is an herbivore or carnivore. Just like a scientist, they must use the clues available

to them to decide what animal it is. Use the summary board to help, and you may even give them choices. Is it a gorilla? giraffe? lion? They should finally come to the conclusion that it is a rhino.

(Note: If a child has difficulty, help them with the identification.)

**Step 4.** Take a look in the telescope to see if you can see the animal. Were you right?

## Extensions

After they have reached their conclusion, direct them to Conservation Station at Rafiki's Planet Watch. We have many scientists here at Disney's Animal Kingdom that track animals all over the world. At the Wildlife Tracking Center they can see how we track many different species. We not only track movement, but also vocalizations and chemicals in the body called hormones. The more we learn about these animals, the easier it is to make informed decisions to help conserve them.

## Clue by Clue

**Clue 1:** "Hello, would you like to help me track a wild animal? We have gotten reports of an animal passing through this area and we would like to figure out just what it was. What is the first clue that we should look for if an animal were walking through here? Footprints, right! Do you see any (*look on the ground as if you are searching for tracks*)? Right here, take a look at these (*bend down to take a closer look*). How many toes does it have? Do you know of any three-toed African animals? What's another clue an animal might leave behind for us?"

**Clue 2:** "Here is another great clue. Do you have any idea what this is? That's right! Poop! Do you think that poop is a good way to learn about an animal? Sure, just by looking at this poop we can figure out several things about our three toed animal. Do you think that it is a big animal or a small animal? I agree, it is probably a big animal. Take a closer look at this poop. What do you see? Plant material. We could tell that our animal is an herbivore just by looking at its poop. If we take a sample of this poop to a laboratory, the scientists could learn about the animal's health, diet, and even if a female animal is going to have a baby. Poop is a great tool to use to study animals."

**Conclusion:** "Now that we have learned some really important clues about our animal (review the clues), it is time to figure out what type of animal it is. Do you have any idea? Well, just like scientists, we need to match up our clues to what we already know about some really cool African animals (use clue board to help kids make their conclusion). A rhinoceros, great job. Let's take a look through our telescope to see if we can spot it. There it is."

"Did you know that rhinos are endangered animals? That means that there are not many left in the wild. This is why it is so important to learn more about these amazing animals without disturbing their natural behavior. Using clues like footprints and poop is a great way to study animals, even the ones in your own backyard. You can also read books and use the internet to learn more about animals and how you can help to protect them, such as contributing to wildlife organizations like Disney's Worldwide Conservation Fund."



## Background Information

### **Lion**

**Scientific Name:** *Panthera leo*

**Range:** Africa, Northwest India

**Description:** The African lion is tawny with white underparts. The tail tuft, ear backs, and lips are black. The mane, found only on males, is tawny to red-brown to black. The body hair is soft and woolly. Their head is broad and powerful, and they have a muscular, compact, deep chested body. They have good eyesight and hearing, and an excellent sense of smell. Lions rely on hearing almost exclusively while hunting at night. They move constantly for better sound location. The lions sight during the day is as good as humans, but their sight at night is six times more powerful than a human's night vision. Their response to moving prey is rapid, but they have some difficulty detecting stationary animals. They hunt by a slow stalk, but can run short distances at 50-60 km/hr (31-37 mph) and leap up to 12 m (13 yd). Lions have well developed canines and incisors for fighting, killing, and tearing meat. They also have teeth called "carnassials" which are modified molars that create a shearing effect when the lower jaw meets the upper jaw. The tongue of a lion is covered with small projections called "papillae." Like your house cat, the papillae give the tongue a slightly rough feeling like sandpaper. Among large cats like lions, the papillae become formidable instruments. A few swipes of a lion's tongue can lick the bones of a zebra carcass clean. The tongue is also used for cleaning and grooming.

**Size:** Adult females weigh 120-179 kg. (265 to 395 lb.) and are 1.4-1.7 m. (4.5 to 5.5 ft.) long. Adult males weigh 150-250 kg. (330 to 550 lb.) and are 1.7-2.4 m. (5.5 to 8 ft.) long. They are both approximately 1.1 m. (3.5 ft.) in height.

**Behavior:** The African lion is crepuscular, more active from the late afternoon until early morning. They spend 20 to 21 hours resting.

They are most commonly found in groups, called prides, averaging 15 members. Prides consist of a dominant male and related females, with young, or bachelor males. Group hunts are common. Females initiate 85-90% of all hunts and kills. Their home range varies from 20-400 sq. km. for non-migratory prides to 4000 sq. km. for nomadic prides. Males protect the pride. The roar, which has a territorial function, can be heard from a distance of 9 kilometers (5.6 mi.), and is one of at least nine reported vocalizations. Roaring can occur at sunset, sunrise, and once a kill has been made; it is an important means of dividing pride territories.

**Reproduction:** The female becomes sexually mature at approximately 4 years of age, the male at approximately 5. Males mate in a sitting position. After 98 to 105 days, the mother gives birth to 2 to 4 cubs. They are hidden for the first few weeks and suckle from any female in the pride, as females tend to birth at the same time. Cubs are spotted with woolly, grayish coats. They participate in kills at 11 months of age and hunt on their own at 16 months, though they are not independent until 3 years of age.

**Lifespan:** An average of 15 years. In captivity, 30 years.

**Diet:** Carnivores that eat antelopes, gazelles, warthogs, smaller carnivores, occasionally Cape buffalo, giraffe, and young elephants. Fully grown males are able to eat up to 18.6 kg. (41 lb.) of meat at one sitting, but only require 6.8 kg. (15 lb.) daily. Adult females require 5 kg. (11 lb.)

**Conservation Information:** Protected by CITES. As agriculture spreads and resources for the lions diminish, lions are shot or poisoned for their attacks on cattle and other livestock, or forced out due to lack of game to hunt.



## **Black Rhinoceros**

**Scientific Name:** *Diceros bicornis*

**Range:** East and Southeast Africa, Northeast Sudan, Northeast Nigeria

**Description:** The black rhinoceros is gray to brownish gray. They have a massive body, with a large head, short muscular neck, broad chest, and stumpy legs. The two horns are composed of compressed keratin of a fibrous nature, similar to our finger nail. Unlike other animals with horns, a rhino's horn is not attached to the skull, so if the horn comes off, it will regenerate (especially in young animals). The horns are sometimes used as a tool to remove bark, break off high branches, and excavate soil at salt licks. The rhino's horn is its primary weapon in defense, however many territorial conflicts between rhinos are settled without actual contact. They usually display ritualistic confrontation behaviors designed to settle these.

The upper lip is triangular and flexible. This prehensile upper lip assists the rhino in grasping leaves and shrubs when they browse for food. Rhinos are very agile in spite of their large, bulky bodies.

They can run in a canter (all four legs off the ground at the same time) and can achieve speeds of 56 km/hr (35 mph). They cannot sustain this pace for long distances, however. The rhino's sense of smell is acute. Rhinos can smell danger at a distance which allows time to plan an escape. Rhinos hear very well. Their ears are large and swivel to locate the direction of the sound. Sight is the black rhino's weakest sense. They are short-sighted and probably detect movement, but not detail beyond 30.5 m. (100 ft.) and detail between 9.2-30.5 m. (30-100 ft.) is limited.

**Size:** Adult males weigh 454-1362 kg. (1000-3000 lb.), with adult females being smaller. Head and body length is 286-305 centimeters (112-121 in.), with a height of 143-160 centimeters (56-63 in.).

**Behavior:** Black rhinos are sedentary, with little physical activity, and have overlapping home ranges. The home range size depends on the resources available and the season, varying from a few hectares in thick bush to 75 square kilometers in semi-desert. Adult males are usually solitary and possibly territorial, but females are usually with their calf. There are communal dung heaps (middens), which help in the identification between animals in an area, through the excellent sense of smell. Vocalizations include puffing snorts, squealing, shrieking, grunting, groaning, and mewing. Mud wallowing helps them cool off (absorb heat) and rid their body of flies, ticks and lice.

**Reproduction:** The female, or cow, becomes sexually mature at 4-5 years of age, and the male, or bull, at approximately 7 years of age. A pre-mating bond develops between the cow and bull, the pair remains together during feeding and resting, and even sleep in contact with each other. This occurs for 2-3 days during the female's estrus period. Bouts of aggression occur until the female is in "standing heat," and mating can last up to 70 minutes. After a gestation period of 15-16 months, the cow gives birth to one calf, weighing 22-45 kilograms(49-99 lb.). Horn development occurs at 4-5 months of age, independence at 2.5-3.5 years. A cow will chase or kill an attacker. Panicked calves can emit a loud squeal which can be heard for at least .8 km. (.5 mi.) away. Juveniles will remain with the mother until they are completely weaned at 1 year, just before a new baby is born.

**Lifespan:** The Black rhinoceros can live an average of 40 years.

**Diet:** Nearly pure browsers, with a marked preference for leguminous herbs and shrubs. Eats over 200 plants in 50 different families.

**Habitat:** Once found in mountain rain forest, the Black rhinoceros can now be found only in arid scrub lands.

**Conservation Information:** Listed by United States Fish and Wildlife Service, or USFWS, as endangered and protected by CITES (Convention on International Trade and Endangered Species). There are about 3610 black rhinos alive today and their numbers are increasing. The prices paid for black rhino horn are so great that many poachers continue to risk their lives to obtain it. The rhinos' endangered status is due to three major factors: 1) Pharmaceutical Market: the black rhino is an endangered species because of the World Market for rhino products. Rhino horn, skin, blood, and urine have been used for many years, especially in Asian cultures, as a presumed medicinal cure-all. Scientific studies have confirmed that there is no therapeutic effect from the rhino products. Scientific proof, especially in cultures that have a long history of a certain medicinal practice, may not stop the total use of rhino products. More education and alternative products may be the way to begin change; 2) Jambia Dagger Handles, a symbol of manhood. In North Yemen, as part of a "coming of age" ceremony, boys are presented daggers (jombia). Traditionally, the handles of these daggers are made of rhino horns. As a result of this practice, the world's population of black rhinos fell from 65,000 to 4,000 from 1970 to 1986. In 1982 North Yemen did pass a law banning the import of rhino horn. The damage was irreversible; 3) Loss of habitat.

## **The Western Lowland Gorilla**

**Scientific Name:** *Gorilla gorilla gorilla*

**Range:** Cameroon, Zaire, Gabon

**Description:** The western lowland gorilla has blue-black to brownish gray hair. Their bare skin is black. Mature males have a silver or gray saddle on their back, thus they are called “silver backs.” Male gorillas that are not of breeding age are called “black back” males. Gorillas have a robust build, with a big stomach, long thick arms, and short legs. Hands and feet are wide with thick digits. The hands are dexterous and can pick up amazingly small, delicate objects. The feet, like the hands, have opposable thumbs. Gorillas walk on all fours with their front fingers carried under. This “knuckle-walking” develops calluses on the knuckles and preserves the sensitivity of the fingers. Their teeth are large with sharp canines. They are used for defense as well as breaking tough vegetation. Sight and hearing are very good, but they have an exceptional sense of smell. There are 16-25 vocalizations which have been observed as well as various body postures. Facial expressions help them also to communicate to others in the family group.

**Size:** Adult females weigh 68.1-113.5 kg. (150-250 lb.), while males weigh 158.9-204.3 kg. (350-450 lb.) The largest primate, they are 1.5-1.8 m. (5-6 ft.) tall.

**Behavior:** They have very well developed social behavior. Their troop, or group, is a non-territorial harem which consists of 2-30 members. In general, the dominant male, or silver back, changes only with births or deaths, and sometimes by the addition of a solitary male. The home range, depending on habitat and size of the troop, is 7-9 square meters (8.4-10.8 sq.yd.). Their day range is 1-2 kilometers (.6-1.2 mi.) daily, and is not territorial. Diurnal, they are most active during the day, and wander casually, changing sleeping quarters daily. When troops meet, they either disregard or greet, usually with no fighting. The intimidating chest-beating of a male gorilla is usually a bluff to scare off intruders, while the rest of his troop disappears into the forest. Staring is a sign of hostility to a gorilla. A direct gaze signals a challenge to the gorilla and may be stressful.

**Reproduction:** The female becomes sexually mature at approximately 8 years of age, the male at approximately 11. The hierarchy within a troop, based on size and seniority, determines mating. After 8 to 9 months, the mother gives birth to one baby, weighing 1.8-2.5 kilograms (4-6 lb.) Twins are rare. The young live with the mother for 3 years, with weaning commencing at 1.5 years.

**Lifespan:** In captivity, 40-50 years. In the wild, 30-40 years.

**Diet:** Eats over 200 distinct species of plants, mainly leaves, buds, shoots, roots, bark, and fruit. Banana and sugar cane plantations are usually sought out. Also eats termites and ants.

**Habitat:** Lowland tropical rain forest, with dense herbage and bushy under growth. Also lives in secondary forest and in the vicinity of plantations.

**Conservation Information:** Listed by USFWS as endangered and protected by CITES. Due to increases in human population and the need to cultivate more land for farming and cattle, natural gorilla habitat is shrinking. Poaching is also a secondary problem for gorillas.



## **The Reticulated Giraffe**

**Scientific Name:** *Giraffa camelopardalis*

**Range:** Africa

**Description:** The reticulated giraffe has patches of variable size and color, usually orange-brown, russet or almost black, separated by a network of cream-buff lines. The spots on each giraffe are different and provide a good tool for identification. Giraffes are hoofed, browsing mammals, adapted for running. They are long necked, which enables them to browse free of competition high among the tree tops, and gives them an advantage as lookouts when predators are near. The long neck has seven cervical vertebrae, the same as humans. They are long legged, even toed, and have a medium length tail with a terminal tuft. While it's neck can be over 1.8 meters (6 ft.) long, the tail can be just as long if you include the tassel of hair at the end. The hairs in the tassel are about 16 to 20 times thicker than human hairs. Also, the tassels are great fly swatters. They have large eyes that distinguish colors and see up to a distance of one kilometer. Their small to large ears provide good hearing and their sense of smell is also good. Their forehead and crown has 2-5 skin covered horns, and their skull is used as a weapon in fighting rivals. They are good runners and can attain speeds of 56 km/hr (35 mph). Adults may use their enormous front feet for defense against lions in defending their young. When walking, a giraffe's strides are 4.6 meters (15 ft.) long. They swing both legs on each side of the body forward at the same time: both right legs, then both left legs.

**Size:** Adult females weigh 550-1180 kg. (1213-2601 lb.) Adult males weigh 800-1930 kg. (1765-2601 lb.) Head and body length is 3.8-4.7 m (12-15 ft.) with height to their horn tips, 4.7-5.3 m. (15-17 ft.)

**Behavior:** They live in small or large groups, with the center of the group being the mother. Several families make a troop. They are crepuscular animals, mainly feeding in the morning and afternoon. At midday they stand in the shade, and at night they stand or lie resting. Harsh coughs, rumbles, and grunts of females are a mixture of excitement and rival fighting. Calves and adults bleat in strong excitement. Snorting through their nostrils appears to be a warning signal.

**Reproduction:** The female becomes sexually mature at 2-3 years of age, the male at 3-3.5 years. After a gestation period of 394-488 days, one active young is born at 1.8 meters (6 ft.), weighing 59 - 63.5 kilograms (130-140 lb.) As with all ungulates (hoofed mammals), the calf must be able to stand and walk within an hour or so. This provides protection against predators. They suckle 6-12 months, and for the first four to five months of life, calves congregate in nursery groups, called creches, to rest and socialize while their mothers forage.

**Lifespan:** Up to 28 years in captivity.

**Diet:** Eats mainly the foliage of trees and bushes, bud shoots, and fruit. Occasionally eats grass, plants, water melons. Maize and other crops are sought out.

**Habitat:** Bush and tree savannas, up to 2000 meters (2188 yd.) from sparsely wooded grasslands to thickly overgrown savanna.

**Conservation Information:** Though not currently endangered, giraffes cannot survive without the savanna habitat. It is important to conserve wild places as well as the animals that live there. This will ensure the survival of future wildlife.



## Sausage Tree *Kigelia africana*

**Range:** Native to tropical Africa.

**Size:** Grown as an oddity in tropical US gardens, it can grow up to 35 feet with evergreen leaves.

**Uses:** In Africa the fibrous pulp of the fruit is mixed with sugar, honey, and water to produce beer.

**Reproduction:** The Sausage Tree flowers in late winter or summer. It has large bellshaped, velvety flowers, which are dark red. In its native Africa the Sausage tree is pollinated by bats attracted to the smell of the tree's flowers (unpleasant to humans) as they open in the evening. Their fruits are a curious two foot long, 8 pound sausage shape that give this tree its name.

**Remarks:** At Disney's Animal Kingdom where pollinating bats are in short supply, the plant keepers pollinate the flowers by hand with a feather duster!

