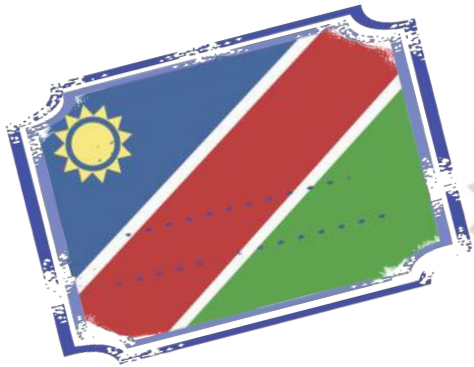


International  
Cheetah Day  
December 4th

CONSERVATION  
PASSPORT



## You Can Make A Difference!

The Cheetah Conservation Fund (CCF) needs your help as you celebrate International Cheetah Day. Make sure to gather more information about cheetahs and spread the word about wildlife conservation. Try making small changes in your everyday life to help your local wildlife and stay involved through service projects or fundraising to help international wildlife. In this conservation passport you will find important information about the cheetah and its race for survival.

## What is Conservation?

Conservation is taking care of the environment in which we live. This means using resources wisely so some of it is left for others or for our own future use.

In order to ensure a successful future we need to be responsible custodians of nature. The way land and animals are managed determines the future of all ecosystems. The balance of nature is tipped through poor land, livestock or wildlife management practices. Financial losses occur when the land cannot support productivity.

## Why December 4th?

It is the birthday of Khayam, a cheetah Dr. Laurie Marker raised from a cub at Wildlife Safari, in Oregon. Khayam was trained for the first research project in rewilding and inspired her first trip to Namibia in 1977.

Dr. Marker took Khayam to Africa to see if she could be taught to hunt in the wild. Through trial and error, Dr. Marker was successful in her efforts, and she eventually brought Khayam back to the US. It was during this time that Dr. Marker found out about how cheetahs were being exterminated by Namibian farmers who viewed them as vermin, and she vowed to do something about it. So Dr. Marker became the cheetah's champion because of Khayam, and chose this animal's birthday as a day to promote cheetah conservation in honor of her memory.



*Once you complete a station, place a check mark on the Passport Stamp.*



## CHEETAH

*Acinonyx jubatus*

Weight: 75 – 120 pounds

Height: 70 – 85 cm

Body Length: 110 – 140 cm

Tail Length: 65 – 80 cm

Wild Life Span: ~ 12 Years

Range: Sub-Saharan Africa with a small population in Iran

Habitat: Open bushveld, grassland savannas

Diet: Carnivore, eating small antelope and other small mammals and birds such as guinea fowl

Namibia Population: approximately 3,000 World Population: less than 10,000

**Namibian Protected Species/ Status: Vulnerable**

The cheetah is the world's fastest land animal and Africa's most endangered big cat with only 10,000 left in the wild. Uniquely adapted for speed, the cheetah is capable of reaching speeds up to 70 miles per hour in just over 3 seconds, and at top speed their stride is 7 yards long. Cheetahs are carnivores and prefer to prey on small antelope species such as steenbok, duiker, springbok, and the calves of larger antelope like oryx, red hartebeest and kudu.



1. Oryx

2. Kudu

3. Duiker

4. Steenbok

5. Springbok

Match the letter with the number to identify the species.

A \_\_\_\_, B \_\_\_\_, C \_\_\_\_, D \_\_\_\_, E \_\_\_\_

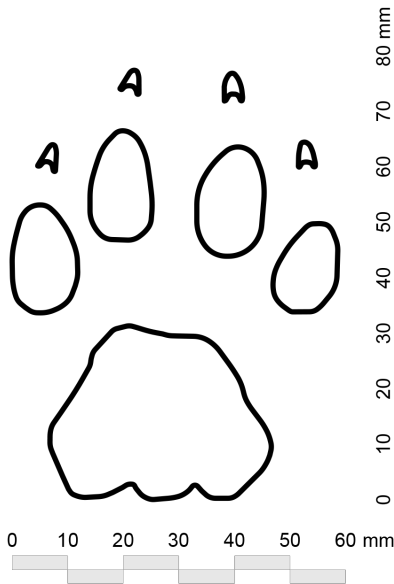
Namibia is proudly known as the 'cheetah capital of the world' because it is home to a 1/3 of the world's population. Most of Namibia's wild cheetahs live on livestock farmland where they are safe from the threat of larger predators such as lions and spotted hyena. CCF works with farmers in Namibia to help keep their livestock such as sheep & goats safe from predators living on their land so we can live in harmony with wildlife and support a healthy ecosystem.



## Cheetah Facts

### 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. Adult cheetahs are easy distinguished from other cast by their solid black spots. The color and spots are a form of camouflage which helps cheetahs hunt prey and hide form other predators. Until about three months of age cheetah cubs have a thick silvery-grey mantle down their back. The mantle helps camouflage the cubs by imitating the look of an aggressive animal called a honey badger. This mimicry may help deter predators such as lions, hyaenas, and eagles from attempting to kill them.



### Track Fact

Cheetahs are the only cat species to leave nail marks as they walk. Cheetah's foot pads are hard and less rounded than the other cats. The pads function like tire treads providing them with increased traction in fast, sharp turns. The short blunt claws work which are considered semi-retractable are closer to that of a dog than of other cats. The claws work like the cleats of a track shoe to grip the ground for traction when running to help increase speed.

### Tear Marks

Distinctive black tear stripes run from the eyes to the mouth. The stripes are thought to protect the eyes from the sun's glare. It is believed that they have the same function as a rifle scope, helping cheetahs focus on their prey.



### Tail

The Cheetah's long muscular tail works like a rudder, stabilizing, and acting as a counter balance to its body weight. This allows sudden sharp turns during high speeds chases. The tail is also thought to be a signaling device, helping young cubs follow their mothers in tall grass. The tip of the tail varies in color from white to black among individuals.



## Lesson 1 - Cheetahs

### Built for Speed Activity

1. Run one sprint and measure your time. Calculate your mph and compare this to a cheetah.
2. Run again at the 30 yard mark once with two legs and once on feet and hands (four legs). Measure this time in seconds.
3. Next count quantity of strides using the 7 yard mark (A stride is one cycle of sequential footsteps, that is, 2 steps for a human and 4 steps for a cheetah)
4. Balance walking heel to toe on a curb or on a drawn line. Take note of what body parts you are using to aid in balancing yourself.

### Background – Adaptations

As the fastest animal on land, with a maximum speed of 110 - 120 km per hour, the cheetah can accelerate from 0-80km in 3 seconds. Their top speed can only be maintained for between 400-500 meters resulting in a short burst of speed (20-30s). They then need to rest for about 30 min. Running is a cheetah's main form of defense, its speed allows it to hunt and escape from danger. Over generations the cheetah has evolved many adaptations to facilitate a specialization for speed. Speed consists of the distance one covers in a certain time; therefore by increasing the distance covered one can increase one's speed.

The cheetah is aerodynamic (stream-lined) for decreased resistance while running. The leg bones are longer in comparison to the other cats and they run on their toes, giving them a longer stride. The cheetah also has a very flexible backbone, which allows it to stretch its body out further. The cheetah's shoulder blades are not connected to the collarbone, thus allowing the shoulders to move freely and help increase the length of the forelegs while running. The hip bones pivot in their sockets, allowing for greater length of the hind legs while running. These adaptations result in a stride of 8 meters at full speed. Their light skeleton and low muscle mass aid the cheetah in running faster by decreasing the weight carried (the larger you are the slower you are). The long tail helps the cheetah to balance and helps the cheetah make sharp turns when running, stabilizes the body and acts as a rudder. A cheetah's foot shows several modifications, allowing for greater grip while running. The pads on the base of the foot bear longitudinal ridges, the function of which is equivalent to tire-treads. The cheetah has semiretractable claws, which serve a function similar to cleats on a track/soccer shoe. It takes a lot of energy to sustain the top speed of a cheetah, and therefore the cheetah has several adaptations to allow more effective delivery of oxygen to the muscles. In comparison to the other large cats, the cheetah's heart, lungs, nostrils and sinuses are enlarged to increase oxygen supply to the muscles.

### Built for Speed Activity Results:

1. A cheetah can run up to 68 mph.

I can run \_\_\_\_\_ mph.

2. At 68 mph, a cheetah can run 30 yards in 1 second.

I can run 30 yards on 2 legs in \_\_\_\_\_ seconds

and on 4 legs in \_\_\_\_\_ seconds.

3. A cheetah can cover 7 yards in one stride when running at their top speeds.

I can cover \_\_\_\_\_ yards in one stride.

(A stride is one cycle of sequential footsteps, that is, 2 steps for a human and 4 steps for a cheetah.)

4. A cheetah uses their long, flat tail to balance them while they run.

I use my \_\_\_\_\_ to balance me when I walk a curb or thin line.



## Lesson 2 - People

### Story Stones Activity

For International Cheetah Day you will make story stones and use them to orally tell stories about Cheetahs in a group circle.

Story telling, folk tales, and myths serve as a means of handing down traditions and customs from one generation to the next in Africa. For several generations, the people of Africa have traditionally passed down knowledge and customs by word of mouth. Often, after a hard day's work, the adults would gather the children together, around a fire and tell stories. Usually the stories are meant to prepare young people for life, and so often taught a lesson or moral.

In the African folk tales, the stories reflect the culture where many types of animals live side by side with people. For better understanding of animals and natural phenomenon, the animals and the natural world were often given human attributes, so it is not uncommon to find animals talking, singing or demonstrating other human characteristics such as values and emotions.

**Materials Needed:**

Flat rocks

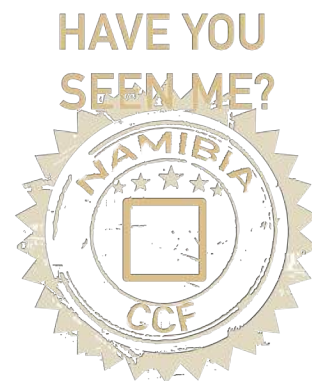
Rock cleaning station, water, soap, and towels

Drawing material: sharpies permanent markers or acrylic paint

Area or space to story tell

**Making Story Stones:**

You will make story stones with cleaned flat rocks. Choose your rock and clean it first. Use colored sharpie permanent markers or acrylic paint to make pictures on the rocks.

**Lesson 3 - Dogs**

Farmers &amp; Cheetahs - Can They Live Together?

Reading *BOOTS' STORY - Guarding Goats and Saving Wildlife in Namibia*, Role-Play, and Discussion

Included below are some of the animals mentioned in the story:

Anatolian Shepherd dog, boer goat, cheetah, African leopard, black-backed jackal, warthog, gemsbok, greater kudu, hartebeest, springbok, and yellow hornbill birds. Photos of the other animals can be found earlier in this booklet.



## **BOOTS' STORY - Guarding Goats and Saving Wildlife in Namibia**

Boots cried as Marie carried him away. He was afraid and no longer saw his brothers and sisters, nor did he see the little goats. Marie put him onto the seat in an old truck. "It's okay, Boots," said Marie. "You'll like it at the DeKlerck farm." The Anatolian Shepherd dog had an important job to do; he had to protect the goat herd from jackals, cheetahs and other predators. Marie drove away from the Cheetah Conservation Fund's farm in Namibia, near the town of Otjiwarongo. Boots put his head out the window and looked back, he did not see his farm anymore.

### **A NEW HOME FOR BOOTS**

Betty eagerly watched the road, wanting to see the new puppy. A truck pulled up to the farmhouse. "They are here," shouted Betty. "Do not get too excited, Betty," said her father. "This dog is not going to be a pet. He is going to guard the goats out in the bush." Marie stepped out of the truck; she was holding nine-week-old Boots in her arms. Betty ran up to Marie and Boots jumped into Betty's arms. He had cream-colored fur covering his body with black fur around his eyes and nose. Boots stuck out his tongue and licked Betty's face and Betty, Marie and Betty's father all laughed. "He knows he is at his new home," said Marie.

### **BOOTS AND THE KIDS**

Boots was put in a barn stall with the little kid goats. Betty and her father watched him as he sniffed and licked the kids. This was more like home. He liked goats, they were part of his family and soon he fell asleep. "Tomorrow Boots will meet the rest of the herd," said Betty's father. "Then he will stay in the pen with the kid goats for a while." The next morning, Betty watched Boots meet the big goats. His ears were flat against his head and his tail was down. He touched noses with each goat and he even licked some of them. "Don't take him out of the pen to play with him," said Betty's father. "The goats need to be his family."

### **BOOTS' NEW FAMILY**

A few weeks passed and every morning before school, Betty sat outside the pen. Boots came to say hello to Betty, but then he went back to his small herd. He ate with the goats. He played with the goats. He slept with the goats. They were his family. "Now, he's ready to go out with John and the big herd," said Betty's father.

### **WATCHING OUT FOR WILDLIFE**

One day, Boots saw a strange dog in the bush. He stood up and barked loudly. It was a black-backed jackal. John picked up a stick and yelled, "Go away!" He shook the stick at the jackal and it ran into the bush. "Good job, Boots" said John as he patted him on the head. Boots saw other wild animals out in the dry thornbush savannah. There were kudu and



gemsbok, hartebeest and springbok and lots of warthogs. These animals ate grasses and leaves from the bushes and they never tried to attack his goat family. One day, Boots and John saw a large, spotted cat. Boots stood up and barked. It didn't leave. Boots moved toward it and barked again. The cheetah looked at him and it turned away and trotted into the bush.

### BOOTS ON HIS OWN

A few months passed and Boots was a big, one-year-old shepherd dog. He went out alone with his goats now. Every morning, Betty saw Boots at the pen. Every afternoon, Betty saw Boots bring the goats into the pens for the night. Boots was always friendly and working hard. He had to guard his goat family. On the weekend, Betty looked at birds through her binoculars. There were many beautiful birds. She watched swallows and shrikes, mousebirds and hornbills. She walked far away from the farmhouse. Betty looked around. "Where was she?" It was going to get dark soon and she was afraid. Leopards, brown hyenas and caracals lived on the savannah farmland.

### BOOTS SAVES THE DAY

Betty heard noises and hid behind a bush. It was Boots and the goats so Betty stood up. Boots ran over to her and touched his nose to her hand, he was telling her to follow him. Betty walked with Boots and the goats. The shepherd dog was taking her home along with his goats. Suddenly Boots stopped walking. He barked loudly as Betty saw a dark shadow creep up to the herd. The goats bleated and were frightened. Boots moved toward the shadow and gave two more deep barks. Betty held her breath. The leopard stopped. He stared at the big dog and the girl, and then he crept away into the bush. Betty let out her breath. The sun went down behind the blackthorn acacias as Betty and the goats started to walk again toward home. They were all safe—thanks to Boots! Betty told her father what had happened, he told her not to go so far from the farmhouse EVER again. Then he hugged and hugged her. "Getting that shepherd dog was the best thing we ever did for our farm," said Betty's father.



## Farmers & Cheetahs: Can They Live Together?

### BOOTS' STORY DISCUSSION:

#### DISCUSSION QUESTIONS ABOUT BOOT'S STORY

1. Why was Boots "not a pet"?

What job did he have to do?

2. What did Boots do when he was with his herd of goats and he saw predators like jackals and cheetahs out in the thornbush savanna?

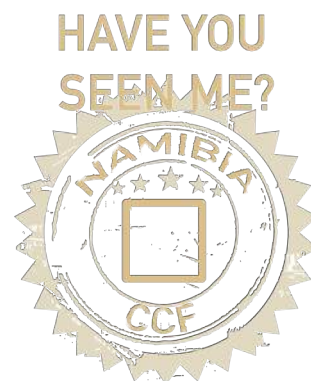
3. Why was this a good behavior?

4. What happened one day when Betty was watching birds using her binoculars?

5. How did Boots save the day?

6. Read the title of the story again. How does Boots save wildlife?

7. If there wasn't a dog like Boots to guard the goat herd, what might happen to the goats? What would the farmer do to the jackals, cheetahs and leopards?



## Worksheet – Farm Management and Planning for Predators

Instructions: You are a member of the Cheetah Conservation Fund (CCF) team. Find the best management technique(s) that you might use to reduce cheetah/human conflicts. Write the correct numbers of the management techniques you would recommend next to the management problems. There may be more than one correct number for each problem.

### Farm Management Problems

\_\_\_\_\_ A. Carnivores have access to domestic livestock during calving time.

\_\_\_\_\_ B. Drought has caused the death of a large amount of wildlife on your farm and cheetahs have begun to attack small stock for food.

\_\_\_\_\_ C. Cheetahs are killing young hartebeest in your game farm. They have managed to get through the game fence by crawling through warthog holes in the fence.

\_\_\_\_\_ D. Heifers continue to lose a large number of calves to predators each year.

\_\_\_\_\_ E. Cows giving birth in camps (where cheetah tracks are seen) that have play-trees, lose more young calves than those in camps closer to the homestead that have only acacia trees.

\_\_\_\_\_ F. Over-hunting of wildlife on a farm to provide more grazing area for cattle has caused predators in the area to hunt livestock.

### Farm Management Techniques

1. Electrify fence and barb the lower wires to prevent warthogs from digging holes.
2. Reduce calf losses by moving calving herds out of the areas where play-trees are located.
3. Bring cows closer to the homestead during calving times.
4. Keep a few older cows with heifers, because many losses of calves in herds occur because the heifers are inexperienced and vulnerable.
5. Keep a larger concentration of livestock in camps during calving to help protect the calves.
6. Keep a few cows or oxen with horns together with the calving herd.

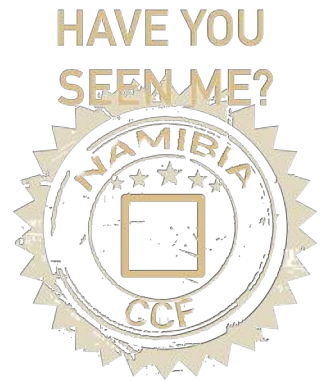
7. Place a few female donkeys with calving herds, as donkeys are aggressive toward intruders and chase away cheetahs.

8. Rotate livestock more rapidly through camps.

9. Promote more aggressive breeds of cattle such as the Brahman and Afrikaner.

10. Employ herders and large breeds of livestock guard dogs with small stock.

11. Promote wildlife re-population on farms, because farms with larger wildlife populations experience fewer predator problems.



## Lesson 4 - Survival

### Cheetah Survival Game Instructions

Play this game to explore some of the hazards cheetahs encounter in their wild life. A series of numbered station cards are placed in this area. Begin by collecting 2 cheetah cards and then roll one of the dice to find out which station you will begin your cheetah journey at (roll a 1, 2, 3, or 4).

Then, follow these steps.

1. To start your journey, roll the die and begin on the card with the number you roll, only 1 through 4. If you roll a 5 or 6, just roll again.

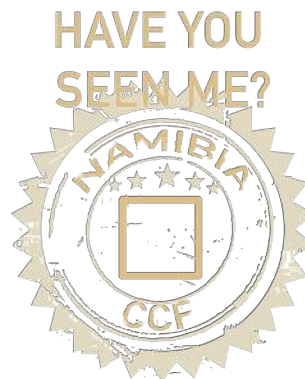
2. Follow the instructions on each station card. When conditions are favorable, the card will tell you to move ahead. When you encounter a hazard, you may be delayed or have to go back. If you are told you have lost a cheetah card please give the card back to the instructor. If you gain a cheetah card ask the instructor for your additional cheetah card.

3. REMEMBER! Not all cheetahs live a long life. Some will live, and some will die. Fill out the chart at the end of the journey.

4. Return all cheetah cards at the end of your journey.

### Cheetah Survival Game Follow-up Questions

1. Did you complete the Cheetah Survival Game? Yes or No
2. Did you survive?  
If so, with how many cheetah cards?
3. Did your cheetah face similar survival problems as wild animals in your area?



### Cheetah Survival Game Chart

**Record who survived** the Cheetah Survival Game and with how many Cheetah Cards.

Who did not survive and why?

## Solve a Mystery...

Use your detective skills to solve the following mystery.

### The Mystery...

Jill, an American tourist, is enjoying a wildlife safari in Namibia. She knows that habitat loss and destruction are the major reasons that many species are endangered. She is surprised to see Cheetah Conservation Fund employees cutting down the bush. Why are they destroying the bush habitat?

### Clue #1

The mission of the Cheetah Conservation Fund is to learn and teach about the cheetah and its *ecosystem*, and to *conserve the cheetah*.



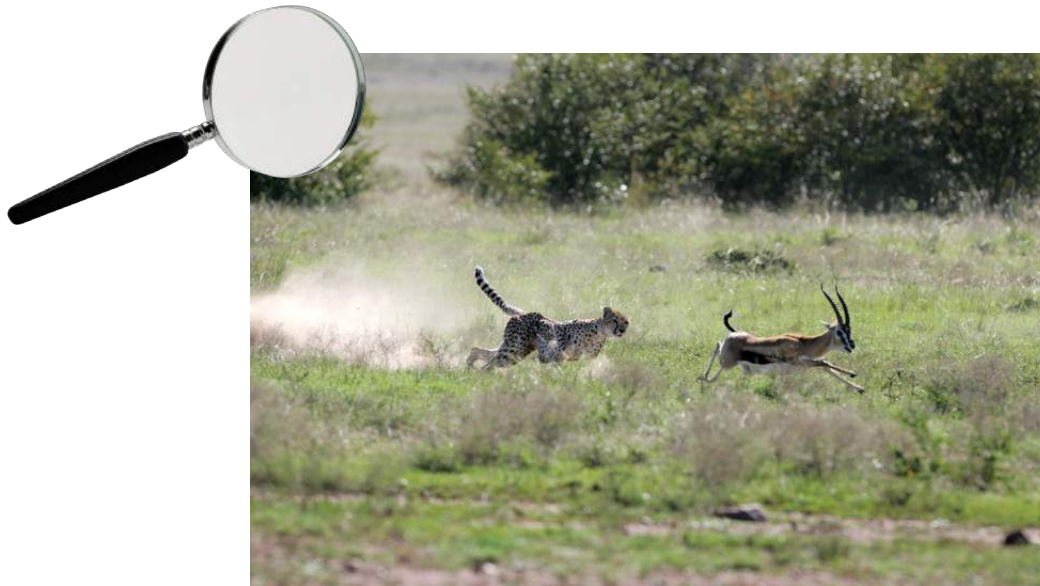
### Clue #2

Elephants and rhinos, which browse on bush and keep it from growing out of control, *no longer range over most of Namibia's land*.



## Clue #3

*A healthy grassland ecosystem supports populations of wild prey, which in turn benefits predators, such as the cheetah and people.*



## Mystery Solved!

Bush is an important part of the savanna habitat. However, under natural conditions, it is scattered throughout the grasslands. Historically, elephant and rhinos that would feed on the bush and natural fires kept the bush from growing out of control. Today most elephants and rhinos are restricted to parks and reserves and fires are prevented, leaving the bush on farmlands to flourish. As the bush takes over, it pushes out the grasses, especially in areas that have been overgrazed. With less grass available, populations of wild herbivores such as oryx and hartebeest have declined. The bush also gets in the way when a cheetah tries to chase down prey and the thorns can cause eye injuries. Less wild prey and worse hunting conditions increases the chance that a predator such as a cheetah will turn to hunting livestock to survive. This increases conflict between farmers and cheetahs.

The Cheetah Conservation Fund works with farmers to find ways that they can live in harmony with the cheetah. One of the goals is to return the savanna habitat back to a more natural state by reducing the amount of bush. Bushblock is a conservation project that harvests bush and manufactures eco-friendly fuel logs sold for heating and braai. Restoring the original habitat will make life better for the farmer and the cheetah, as well as other native wildlife.



## Did you Know?

One of the greatest threats to the cheetah and other predators in the wild is human-wildlife conflict. Over 90 % of cheetahs live outside protected areas, meaning that they live alongside human communities. Most of these are commercial and communal farming communities raising cows, sheep, and goats.

## CCF Human-Wildlife Conflict Management Programs:

### Livestock Guarding Dog Program:

CCF's renowned Livestock Guarding Dog Programme has been very effective at reducing predation and thereby reducing the need for farmers to trap or shoot cheetahs. CCF breeds Anatolian Shepherd and Kangal dogs that for thousands of years have guarded smallstock against predators in Turkey. The dogs are placed with livestock farmers as puppies to bond with the herd and use their loud bark to scare away potential predators.



### Future Farmers of Africa:

CCF operates a Model Farm that raises cattle, goats, and sheep and researches predator-friendly farming methods, including herd and veld management, livestock and wildlife management and other techniques. The Model Farm is an educational center for Namibian farmers to learn and CCF leads by example. Through training courses, education materials, trade shows, and other opportunities, CCF has reached thousands of farmers. CCF's programs are also used in other cheetah range areas of Africa.

Farmers as conservationists: Namibian farmers practice diverse farming activities that form part of the ecosystem. It is farmers, hunters, and game managers who will conserve Namibia's precious ecosystem for future generations to enjoy. There is no single solution to predator conflicts. Effective predator control and overall farm management requires a variety of integrated management strategies.

### Livelihood Development:

CCF promotes humans living in cheetah country through livelihood development. The Dancing Goat Creamery produces and sells dairy products made from CCF's goat milk, demonstrating to small livestock farmers a viable source of supplemental income that can make their farms more prosperous.







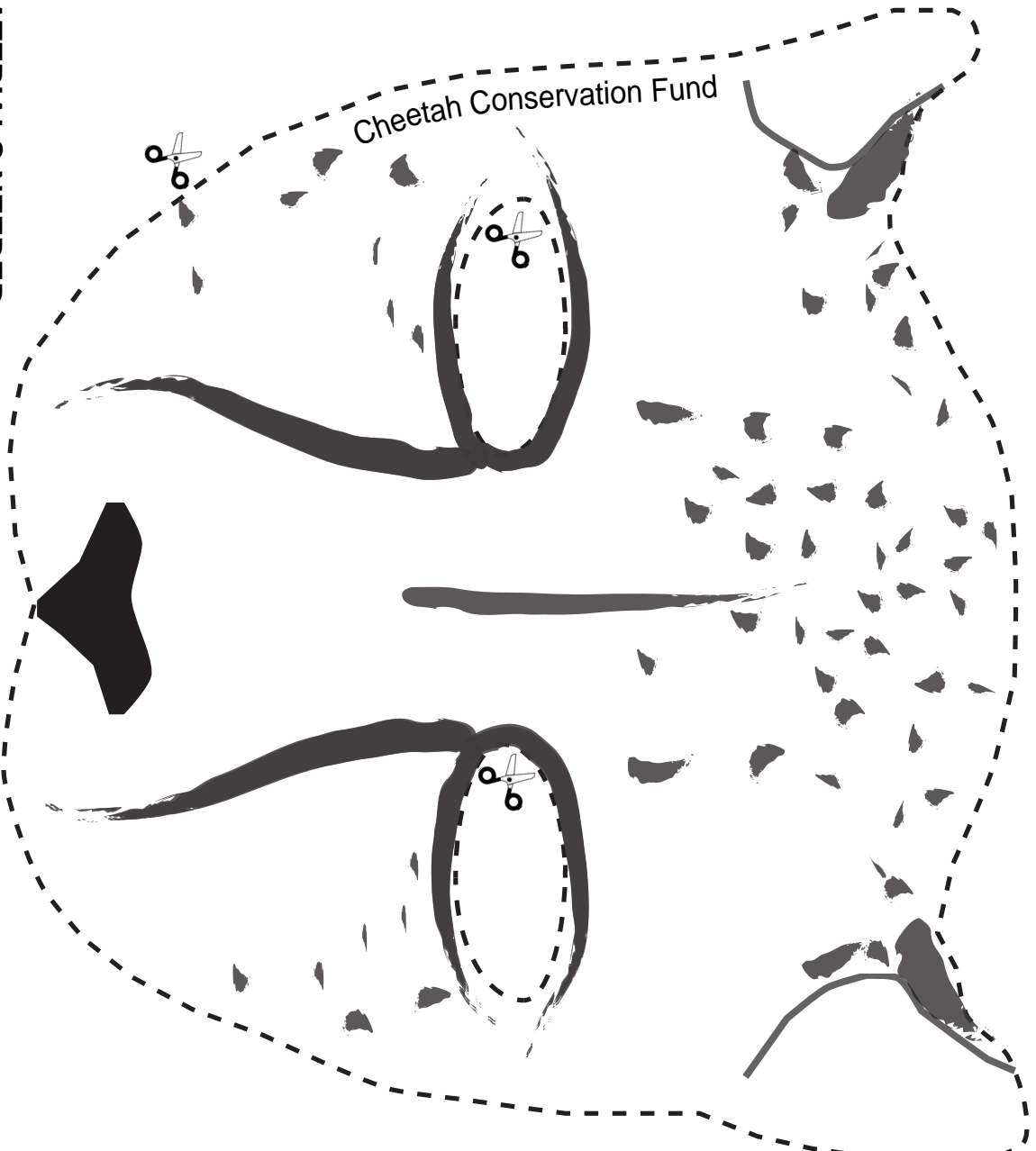
**Cheetah**  
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Cheetah Conservation Fund.**

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CHEWBAAKA	VETERINARIAN
CHEETAH RELEASES	VISIT CCF
DANCING GOAT CHEESE	WILD CHEETAHS
FARMER TRAINING	VISITOR CENTRE
FASTEST LAND MAMMAL	INTERNATIONAL CHEETAH DAY






# Cheetah Mask Template



## MATERIALS NEEDED:

- Cheetah mask template
- Card stock or heavy weight printer paper
- Crayons, markers, glitter, paint, or anything else to color your cheetah face
- Scissors
- Glue
- Popsicle stick

## INSTRUCTIONS

-  Print the Cheetah Mask Template onto card stock or heavy paper
  -  Decorate your cheetah mask
  -  Cut along the dotted lines
  -  Glue a popsicle stick to the back of your cheetah mask. This is how you will hold the mask up to your face.
  -  Take a picture of your cheetah mask and send it to CCF. Email: [info@cheetah.org](mailto:info@cheetah.org) Mail: P.O. Box 2496 Alexandria, VA 22301
- Be sure to include your name and age and your cheetah mask will be featured on our website gallery. We will post our gallery at [www.cheetah.org](http://www.cheetah.org).

THIS CERTIFICATE OF CHEETAH ACHIEVEMENT  
RECOGNIZES:

\_\_\_\_\_ Name

FOR PARTICIPATING IN INTERNATIONAL CHEETAH DAY  
ACTIVITIES AT \_\_\_\_\_ ON \_\_\_\_\_  
Zoo or School where event took place  
AND FOR OVERALL EXCELLENCE IN  
\_\_\_\_\_ Date  
ALL THINGS CHEETAH!

*Laurie Marker*

Dr. Laurie Marker  
Founder & Executive Director - CCF





Photos by CCF staff and volunteers as well as Suzi Eszterhas and Andrew Harrington