

Jacksonville Zoo and Gardens  
**Education Department**  
**Habitats & Geography**

**Before you visit the zoo, identify the countries that belong to the following areas of Africa:**

What countries are included in East Africa?

Sudan, Eritrea, Ethiopia, Djibouti, Somalia, Uganda, Kenya Madagascar, Comoros, Seychelles

What countries are included in Central Africa?

Chad, Cameroon, Central African Republic, Democratic Republic of CONGO, Rwanda, Burundi, Republic of CONGO, Gabon, Equatorial Guinea, São Tomé, Príncipe

What countries are included in Southern Africa?

Angola, Zambia, Namibia, Botswana, Tanzania, Malawi, Mozambique, Zimbabwe, Swaziland, Lesotho, South Africa

What countries are included in Western Africa?

Mauritana, Mali, Niger, Nigeria, Benin, Togo, Ghana, Ivory Coast, Liberia, Sierra Leone, Guinea, Guinea-Bissau, Gambia, Senegal, Cape Verde, Mauritania, Burkina Faso

What countries are included in North Africa?

Western Sahara, Morocco, Algeria, Tunisia, Libya, Egypt

Describe each of the following habitats (name the dominant plant found or describe the type of vegetation found in each, list the amount of rainfall received and the average daytime temperatures):

	Kind of Plants	Rainfall	Ave. Temperature
Desert	Succulents	Less than 8"/yr	70° - 80° F
Rain Forest	Diverse layered forest	Over 60"/yr	70° - 80° F
Savanna	Grasses	10" – 30"/yr	70° - 80° F
Mountains	Varies with Altitude	20" – 60"/yr	45° F
Scrub	Shrubs & herbs	8" – 20"/yr	60° F

**In Plains of East Africa at the zoo, name the animals that live in the habitats below:**

**Desert**

Bullfrog  
Naked Mole  
Rat

**Scrub (semi-arid)**

Speke's Gazelle  
Egyptian Cobra  
Rock Python  
Hadada Ibis

**Savanna**

Wart Hog  
Impala  
Leadbeater's Ground  
Hornbill  
Kori Bustard  
Cheetah  
Ostrich  
White Rhino  
Greater Kudu  
Cape Buffalo  
Egyptian Cobra  
Lowland Swamp Viper  
Pancake Tortoise  
Puff Adder  
Mole Snake  
Lappet-faced Vulture  
Marabou Stork  
White-bellied Bustard  
Guinea Fowl  
Bush Elephant  
Plains Zebra  
Lion

**Rain Forest**

Bongo Antelope  
Gaboon Viper  
Green Mamba  
Turacos  
Forest Elephant  
Colobus Monkey

**Mountains**

Mt. Kenya Bush Viper  
Klipspringer  
Ruwenzori Long-haired Fruit Bats  
Rock Hyrax

Most of the animals on exhibit are herbivores or plant-eaters. Some are "browsers" and some are "grazers". What is the difference between these two types of feeding strategies?

Grazers eat grasses and find food close to the ground; browsers eat shrubs and tree leaves and find food above the ground.

Explain how browsers and grazers "share" the savanna in Africa.

Grazers and browsers eat different plants and can share the habitat without competing with one another.

Pick one animal from each habitat that you listed above and describe the adaptations it has for surviving in its habitat.

	Animal	Adaptations
Desert	_____	Gets water from foods; rests in heat of day.
Scrub	_____	Gets water from foods; burrows to keep cool.
Savanna	_____	Migrates; live in herds; camouflage.
Rain Forest	_____	Gripping limbs -hands, feet, tails; camouflage.
Mountain	_____	Spongy soles of feet for traction.

Identify and compare and contrast the two types of elephants:

	African Elephant	Asian Elephant
Height	Larger	Smaller
Weight	Heavier	Lighter
Ears	Shape of Africa (larger)	Shape of India (smaller)
Back	Concave	Convex
Trunk	Two "fingers" on end	One "Finger on end

How much does one elephant eat and drink in a single day?

330 lbs. of plants and 19 to 24 gallons of water

Based on your answer above calculate how much a herd of 12 elephants eats and drinks each day.

	12 elephants		12 elephants
X	330 lbs. of plants/day	X	19 or 24 gallons of water/day
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	3,960 lbs. of plants/herd/day		228 or 288 gallons of water/herd/day

How much does this herd eat and drink each week?

	3,960 lbs. of plants/herd/day		228 or 288 gallons of water/herd
	X 7 days/week		X 7 days/week
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	27,720 lbs. of water/herd/week		1,596 or 2,016 gallons of water/herd/week

How many elephants could survive in Duval County? 2 to 4

Why? Because each elephant needs 290 to 620 square miles to survive and Duval County is only 840 square miles in area.

Rocky, scrub-covered land forms in Africa are called kopjes. List some of the animals on exhibit that live in this kind of habitat (hint – there is a replica of an elephant skull in this exhibit):

Rock Hyrax, Turacos, Klipspringer, Hadada Ibis

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**Before you visit the zoo, complete the following activities:**

What countries are included in East Africa?

_____	_____	_____
_____	_____	_____
_____	_____	_____

What countries are included in Central Africa?

_____	_____	_____
_____	_____	_____
_____	_____	_____

What countries are included in Southern Africa?

_____	_____	_____
_____	_____	_____
_____	_____	_____

What countries are included in Western Africa?

_____	_____	_____
_____	_____	_____
_____	_____	_____

What countries are included in North Africa?

_____	_____	_____
_____	_____	_____
_____	_____	_____

Describe each of the following habitats (name the dominant plant found or describe the type of vegetation found in each, list the amount of rainfall received and the average daytime temperatures):

	Kind of Plants	Rainfall	Temperature
Desert	_____	_____	_____
Rain Forest	_____	_____	_____
Savanna	_____	_____	_____
Mountains	_____	_____	_____
Scrub	_____	_____	_____

**In Plains of East Africa at the zoo, name the animals that live in the habitats below:**

Desert

Scrub (semi-arid)

Savanna

Rain Forest

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Mountains

_____	_____	_____	_____
_____	_____	_____	_____

Most of the animals on exhibit are herbivores or plant-eaters. Some are “browsers” and some are “grazers”. What is the difference between these two types of feeding strategies?

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Explain how browsers and grazers “share” the savanna in Africa.

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Pick one animal from each habitat that you listed above and describe the adaptations it has for surviving in its habitat.

	Animal	Adaptations
Desert	_____	_____
Scrub	_____	_____
Savanna	_____	_____
Rain Forest	_____	_____
Mountain	_____	_____

Identify and compare and contrast the two types of elephants:

\_\_\_\_\_ Elephant

\_\_\_\_\_ Elephant

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How much does one elephant eat and drink in a single day?

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Based on your answer above calculate how much a herd of 12 elephants eats and drinks each day.

12 elephants

12 elephants

X \_\_\_\_\_ lbs. of plants/day

X \_\_\_\_\_ gallons of water/day

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\_\_\_\_\_ lbs. of plants/herd/day

\_\_\_\_\_ gallons of water/herd/day

How much does this herd eat and drink each week?

\_\_\_\_\_ lbs. of plants/herd/day

\_\_\_\_\_ gallons of water/herd

X 7 days/week

X 7 days/week

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\_\_\_\_\_ lbs. of water/herd/week

\_\_\_\_\_ gallons of water/herd/week

How many elephants could survive in Duval County? \_\_\_\_\_

Why? \_\_\_\_\_

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Rocky, scrub-covered land forms in Africa are called kopjes. List some of the animals on exhibit that live in this kind of habitat (hint – there is a replica of an elephant skull in this exhibit):

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