Wild Lessons
Utah's Hogle Zoo

Utah's Hogle Zoo

Habitats of the World: 1-2

Welcome to your Wild Lessons Tour! This guide will take you on an educational tour through Utah's Hogle Zoo, complete with questions to prompt discussions with your students, while visiting an array of our amazing animals! Enjoy your journey through Utah's Hogle Zoo!

During this tour, you will explore some of the habitats found around the world, and the animals that live in them. Every habitat has different features that make it a unique place for animals to live. Animals must have specific adaptations to survive in their habitat.

Education Standards:

1st Grade:

1.b Analyze the individual similarities and differences within and across larger groups.

2.b Make observations about living things and their environment using the five senses.

2nd Grade:

1.a Compare and contrast the characteristics of living things in different habitats.

2.a Communicate and justify how the physical characteristics of living things help them meet their basic needs.

2.b Observe, record, and compare how the behaviors and reactions of living things help them meet their basic needs.

1. African Savanna

The first stop on your tour will be the African Savanna exhibit. A savanna occurs in areas that do not receive enough rain to make it a rainforest, but receive enough to keep it from becoming a desert. It is made up of large expanses of grasses, with scattered shrubs and trees.

- Have students brainstorm the kinds of animals they think live on the African savanna.
- How do a zebra's black and white stripes help it survive in a tan habitat?
- How does having a long neck help a giraffe survive on the savanna?

Some common animals found on the African Savanna are giraffes, zebras, African lions, African elephants, antelope, ostriches, cheetahs, rhinos, hyenas and warthogs.

A zebra's stripes don't help it to blend in with its habitat, but rather to blend in with each other! Zebras live in large herds, and when all of their stripes blend together, a predator such as a lion cannot pick out an individual zebra to attack!

While the rest of the grazing animals on the savanna have to compete for grasses and small plants on the ground, giraffes have the high tree branches all to themselves with the help of their long necks! Giraffes will spend most of the day eating leaves from acacia trees, their favorite meal!

Location: African Savanna

2. Tropical Rainforest

Stop in the Great Apes building to visit the Bornean orangutans. This species of orangutan lives in the tropical rainforest of Borneo. Tropical rainforests cover less than 6 percent of the earth's surface, but are home to more than 50 percent of the world's plant and animal species! They form a lush, green band around the equator, getting more than 60 inches of rain per year.

- Have students brainstorm what kinds of foods they eat from the rainforest.
- What physical adaptations help orangutans move around in the rainforest?
- How might an orangutan use the rainforest canopy to survive?

The rainforest provides us with many kinds of foods! Fruits like bananas, oranges, grapefruit, tomatoes and pineapple all originally came from the rainforest! Foods like rice, peanuts, potatoes, corn, chocolate, and even chickens, all came from the rainforest as well!

Orangutans have multiple adaptations that let them move through the rainforest trees with ease. They have long fingers and toes that easily grasp branches, as well as arms that are longer than their bodies to swing through the trees. Both their hands and feet have thumbs which allow them to hold on to branches tightly.

Orangutans spend most of their lives in the canopy of the rainforest. They use the leafy branches as shelter from the sun or rain, and staying high up in the trees helps them to avoid predators such as tigers, leopards and pythons.

Location:
Great Apes

Big 6

The Bornean orangutan's habitat is rapidly declining, due to the palm oil industry. Palm oil is a common product found in various snack foods, beauty products and soaps. The development of these palm oil plantations requires the clearing of large areas of rainforest. The Bornean orangutan is part of our Big 6 conservation in partnership with Kinabatangan Orangutan Conservation Project.

After your trip to the Zoo, have students go home and try to find foods and products with palm oil in them. Have them bring the products to class and use the palm oil app from Cheyenne Mountain Zoo to see if they are made from sustainable palm oil. If they are not, can they find an alternative product that is?

3. Tundra

Next, stop at the Rocky Shores exhibit to visit the polar bears. Polar bears live in the Arctic tundra, where temperatures can reach -70° Fahrenheit in the winter, as well as a contrasting 77° Fahrenheit in the short summer season. Small plants still manage to grow in the frozen permafrost soil, but high winds don't allow taller plants to grow well.

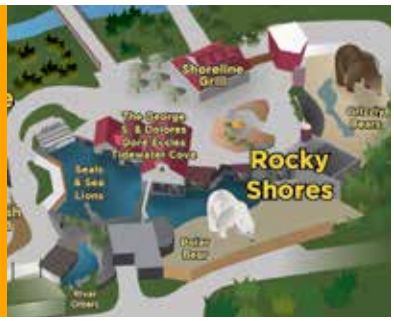
- Have students guess what a polar bear would eat in the Arctic tundra.
- How does a polar bear's fur help it survive?
- How does melting sea ice, due to climate change affect the polar bear's survival?

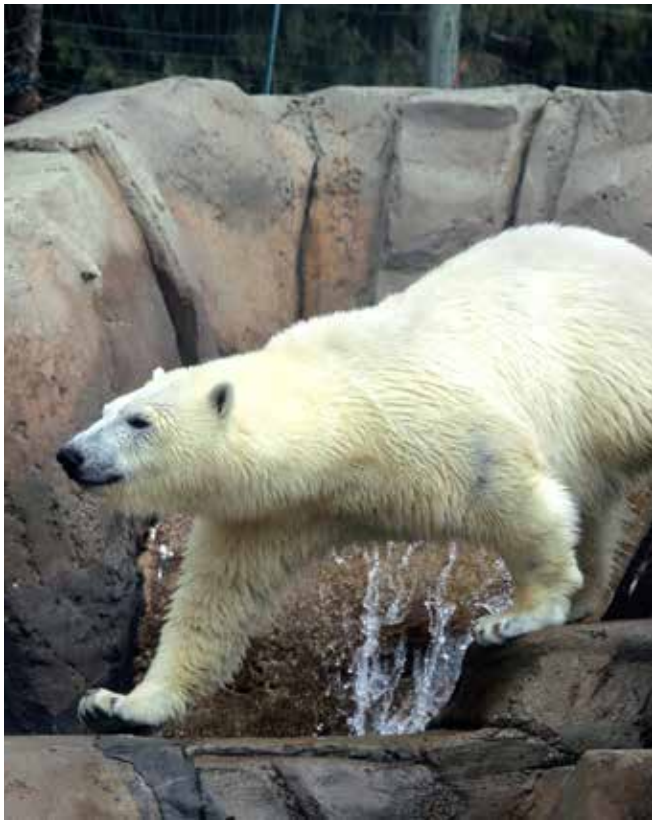
A polar bear's main prey is the ringed seal, which provides a high enough calorie meal to give them energy for 11 days! They have also been known to eat walrus and caribou, as well as grass and seaweed.

The fur of a polar bear is thick, clear and hollow, helping the polar bear survive the cold tundra climate in several ways. Polar bears have black skin, with clear tube-like hairs. When the sun is out, the black skin absorbs warmth from the sun, and the hollow hairs help trap the warm air, creating a warm air bubble around the bear. The hairs are also waterproof, helping to keep the polar bear dry.

Polar bears have adapted to life on the Arctic sea ice, relying on it to hunt ringed seals. Climate change is causing record-breaking sea ice losses, forcing polar bears ashore in the summer. Polar bears have to scavenge for food during this period and can starve. This brings them into closer contact with humans, who can be deadly for the polar bears.

Location:
Rocky Shores





Big 6

Climate change is rapidly decreasing the amount of sea ice in the Arctic. This is affecting the polar bear's survival. The polar bear is part of our Big 6 conservation, in a partnership with Polar Bears International. By making a few small changes in our daily lives, we can help reduce the effects of climate change. Challenge your students to:

- Unplug appliances when not using them
- Have their parents turn down the thermostat by two degrees in the winter and up two degrees in the summer.
- Make sure their parents are not idling their cars

Visit polarbearsinternational.org
for more information!

4. Deserts

Head over to the Small Animal Building to visit the desert tortoises. They may be inside or outside, depending on the season. Deserts are hot, dry regions where more water evaporates than falls. Deserts usually have sandy, rocky, mountainous features, with high temperatures in the day, and cold temperatures at night. Despite the harsh conditions, many species of plants and animals still live there.

- Have students brainstorm which animals they think live in the Utah desert.
- Desert tortoises burrow into the ground; how does this behavior help them survive in the desert?
- Have students guess where the desert tortoise gets its water in the desert.

Common animals found living in the Utah desert are rattlesnakes, coyote, desert tortoises, pronghorn antelope, badgers, road runners and jack rabbits.

The desert tortoise burrows underground to protect itself from the desert climate. When it is hot in the desert, burrowing underground helps keep the tortoise cool. In the winter when it gets too cold, it hibernates in its burrow, which also helps protect it from predators.

Desert tortoises get the water they need from the plants they eat! Plants like cactus, grasses, flowers and fruit contain a lot of water, which the tortoise is able to store in its body for up to a year! The desert tortoise will also dig small holes in the ground to catch the small amount of rain that falls in the desert. They remember where these holes are, and will walk straight to them after a rainfall!

Location:
Small Animal Building

5. Mountains

Location:
Asian Highlands

The final stop on your tour will be to visit the snow leopards in Asian Highlands. These animals live in high mountainous regions of Central Asia. Mountains are more than 1,900 feet in elevation, with steep sloping sides, rounded ridges and peaks. They get significant amounts of snow in the winter, and can be rocky and barren above the tree line at the summit. Many animals thrive in the lower, lush foothills, but some brave the harsh conditions of the higher elevations.

- Ask students to describe what the mountains in Utah look like.
- How does a snow leopard's fur help it survive in the mountains of Central Asia?
- Why are snow leopards so hard for scientists to find in the wild?

Here in Utah, the mountains are rocky and snowy, with lush forests covering most of them, as well as barren areas, where little vegetation grows. The elevations of Utah Mountains range from 4,000 to 11,000 feet. In Central Asia, where snow leopards are found, the mountains reach much higher elevations of 23,000 feet! This makes the snow leopard's habitat much colder, snowier, and rockier, with few plants.

A snow leopard's fur allows the leopard to be perfectly camouflaged in its habitat! The grey spotted coat blends perfectly with the grey, barren rocky slopes that they inhabit. This helps them become almost invisible to their prey when hunting. Their fur is also very thick to keep them warm in the cold climate.

Snow leopards are very hard for scientists to study because they are hard to spot! They blend in so well with their habitat that it is almost impossible to see them. Their habitat is also a challenge for humans to work in! It is not known exactly how many snow leopards are left, but it is estimated that only 4,000 to 6,000 remain, making them even more elusive!