### EVEREST Education Expedition



# **Bengal Tiger**

Common name: Bengal Tiger, Indian Tiger Scientific name: Panthera tigris tigris Category: mammal

Physical adaptations that allow it to survive in the Himalaya: A tiger's hind limbs are longer than the forelimbs, an adaptation for jumping. The forelimbs and shoulders are well-muscled, and the forelegs can twist inward, enabling the tiger to grab and hold large prey.

Habitat Zone: lower alpine

Diet: Various animals including deer, wild boar, and sometimes other predators like leopards. Connected species: Bengal tigers depend upon a variety of prey to survive. People in China use the tiger's bones and body parts for traditional Chinese medicine (muscle strengthener/body pain). Status: Endangered

**Fun Fact:** The Bengal tiger is the most numerous of all tiger subspecies with around 1,850 individuals surviving in the wild, even though it's endangered.

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**Alpine Chough** 

Common name: Alpine Chough or Yellowbilled Chough (pronounced chuff) Scientific name: Pyrrhocorax graculus Category: bird Physical adaptations that allow it to survive in the Himalaya: The eggs have adaptations to the thin atmosphere that improve oxygen intake and reduce water loss. Habitat Zone: middle alpine, upper alpine, arctic **Diet**: Invertebrate prev in summer and fruit in winter: and food from climbers Connected species: insects, fruits, and the people who leave behind food that they scavenge Status: None Fun Fact: Choughs mate for life.

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### Orchid

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Common name: varies Scientific name: varies Category: plant Physical adaptations that allow it to survive in the Himalaya: the moist climate and the cloud forest environment is ideal for them

Habitat Zone: Lower alpine zone Connected species: Butterflies, insects, and herbivores of the Everest region. Many orchids are epiphytes (plants that grow on top of other organisms in order to survive). Status: some native species are endangered Fun Fact: There are over 600 species of orchid in the Himalayas. Orchids are ancient flowers that could be as old as 75 million years, meaning that they lived in coexistence with dinosaurs. Over-collection from the wild is one of the main threats to orchids. 

### **Tree Rhododendron**

Common name: Tree Rhododendron Scientific name: Rhododendron arboreum Category: plant

Physical adaptations that allow it to survive in the Himalaya: This species of rhododendron is able to grow very large because of the Himalayan monsoons and spring snowmelt that provides lots of moisture for the plants that live below Mount Everest. Habitat Zone: lower alpine zone Connected species: Rhododendron forests are home to red pandas, musk deer, blood pheasant and hundreds of other animals and birds. It is eaten by musk deer and other animals. Status: None

**Fun Fact:** *R.arboreum* is the national flower of Nepal and on the national coat of arms. Other species of rhododendron can live higher in the middle alpine zone. These rhododendrons are shorter and have smaller leaves to protect them from the high winds of Mount Everest.

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shaggy hair that almost reaches the ground to keep them warm in the cold alpine environment. They have wide hooves that are to help them walk through thick snow. Habitat Zone: lower alpine, middle alpine, and upper alpine zones Diet: Grasses, herbs and lichens, and eating ice and snow as a source of water grasses and sedges. Connected species: Prey for the snow leopard, brown bear, and Tibetan wolf. Eaten and used as a pack animal by humans. Status: Vulnerable (not yet threatened) Fun Fact: The yak has an extra set of ribs to protect

Physical adaptations that allow it to survive in the Himalaya: Yaks have a dense undercoat of soft,

closely-matted fur, covered by dark brown, long and

its larger lungs needed to live at such high altitudes with so little oxygen.

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Common name: Yak

Category: mammal

Scientific name: Bos mutus

Juniper

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Common name: Juniper, Himalayan Juniper, Dropping Juniper Scientific name: Juniperus recurva Category: plant Physical adaptations that allow it to survive in the Himalaya: Juniper plants grow in dry and rocky soil including chalky soils or limestone dumps. Juniper thrives best in open spaces and where there is plenty of sunlight. Habitat Zone: lower and middle alpine zone **Connected species**: Juniper helps hold the fragile topsoil together at high altitudes helping other plants grow and minimizing landslides. It is an important

source of wood for humans to use as cooking fuel. Status: none Fun Fact: Juniper is used in traditional ceremonies

and for fuel for cooking and heating homes. Since the first Everest expeditions, many Juniper forests have been dramatically reduced in size.

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## **Blood Pheasant**

Common name: Blood Pheasant Scientific name: Ithaginis cruentus Category: bird

Physical adaptations that allow it to survive in the Himalaya: They travel in groups for safety and move to lower altitudes in the winter and higher altitudes in the summer for food and safety.

Habitat Zone: lower alpine and middle alpine Diet: They prefer green foods and in the wild they eat mostly lichens. They pick up food with their bills, seldom dig for food with claws. Connected species: the plants they eat and the humans who occasionally eat them Status: None

**Fun Fact:** Blood pheasants are good runners but do not fly well. The Blood Pheasant is the state bird of the Indian state of Sikkim.



# Himalayan Black Bear

**Common name:** Himalayan Black Bear, Asiatic Black Bear

Scientific name: Selenarctos thibetanus Category: mammal

Physical adaptations that allow it to survive in the Himalaya: During the winter months they may hibernate for 4 to 6 months, although some bears will simply move to lower elevations.

Habitat Zone: lower alpine

**Diet**: The diet varies with season consisting of grasses, buds and blossoms, acorns, other wild fruits and berries, crops, insects and meat.

**Connected species:** All of the plants and animals it eats. Parts of the bear are used in Chinese medicines.

Status: Vulnerable

**Fun Fact:** The Himalayan Black Bear can climb trees to find food. It may use rest platforms in trees made of branches broken while feeding.

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## Himalayan Monal

Common name: Himalayan Monal, Impeyan Monal, Impeyan Pheasant or Danphe Scientific name: Lophophorus impejanus Category: bird

Physical adaptations that allow it to survive in the Himalaya: strong legs and a long, curved beak which together enable it to dig into the hard soil of the mountains (up to 25 cm deep) to uncover seeds, tubers, shoots, berries, and insects

Habitat Zone: lower alpine and middle alpine Diet: seeds, tubers, shoots, berries, and insects Connected species: the plants and insects it eats, humans hunt and eat them Status: None

**Fun Fact**: National bird of Nepal. In the 2009 Disney-Pixar Film "Up," the large flightless tropical bird "Kevin" (which is actually a female) is based upon the iridescent appearance of a male Himalayan Monal found at the Sacramento Zoo.

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### **Snow Leopard**

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Common name: Snow Leopard Scientific name: Panthera uncia, Uncia uncia Category: mammal

Physical adaptations that allow it to survive in the Himalaya: A snow leopard's coat has long hair with dense, woolly underfur to keep them warm and is colored to camouflage them in their snowy, rocky habitat. Snow leopards also have a long tail to help them balance and to wrap around themselves while they are resting and unusually large nasal cavities that help them breathe the thin, cold air. Habitat Zone: lower alpine, middle alpine, and upper alpine zones

**Diet**: blue sheep, Argali wild sheep, Siberian ibex, Asiatic ibex, marmots, pikas, hares, Tibetan snowcock and chukor partridge

**Connected species**: Eats yaks, Himalayan Tahr and animals listed above. Its fur and bones are used in Chinese medicines.

Status: Endangered

**Fun Fact**: The snow leopard cannot give a full, deep roar like other 'big cats'.

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Diet: Mainly leaves, flowers, and grasses, with some mosses and lichens They can jump into trees to find vegetation to eat. Habitat Zone: lower alpine, middle alpine

Connected species: Eats rhododendron and is occasionally eaten by tigers and bears. The musk produced by this genus of primitive deer is highly held for its cosmetic and alleged pharmaceutical properties, and can fetch U.S. \$45,000 per kilogram (2.2 pounds) on the international market. Status: Endangered

Fun Fact: Musk deer don't have antlers but the males do have long fangs or tusks instead.

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Common name: Himalayan Tahr, Himalayan Thar, Common Thar Scientific name: Hemitragus jemlahicus

Category: mammal Physical adaptations that allow it to survive in the Himalaya: It has a long coat and dense undercoat to keep it warm in high altitudes. It also has specialized hooves with a flexible, rubbery core that allows it to grip smooth rocks Habitat Zone: middle alpine

Diet: The tahr will eat almost any vegetation they can find, from grass and herbs to the leaves of shrubs and trees.

Connected species: Eats vegetation. Prey of the leopard.

Status: Vulnerable (not yet threatened)

Fun Fact: The tahr will rear up on its hind legs to reach for branches and then

tough vegetation it eats, the Tahr will regurgitate the pulp of the meal it just ate hold them down with their front legs as they eat. To get the most out of the and chew it over again to get more nutrients.

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Common name: Jumping Spider, Himalayan Jumping Spider Scientific name: Euophrys omnisuperstes Category: arthropod

Physical adaptations that allow it to survive in the Himalaya: they use hydraulic (using pressurized liquid) power to jump high which helps them move up and down mountains and catch bugs

Habitat Zone: upper alpine and arctic zone

Connected species: the small insects they eat and the birds who eat them Diet: Stray insects that are blown up the mountainside by the wind Status: None

making it possibly the highest known permanent resident on earth. The name given to the species means "standing above everything." Fun Fact: It lives at elevations of up to 6,700 meters on Mount Everest

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Common name: Red Panda

Scientific name: Ailurus fulgens

Category: mammal

Physical adaptations that allow it to survive in the Himalaya. Red pandas use their long, bushy tails to balance when they're in trees. They also cover themselves with their tails in winter have thick white hair on the soles of the feet for warmth

Habitat Zone: lower alpine

Diet: They eat mostly bamboo, and may eat small mammals, birds, eggs,

blossoms, berries, mushrooms, roots, acoms, lichen, and grasses. Connected species: Preyed upon by the snow leopard and marten. Eats small mammals birds and berries. Deforestation by humans reduces the

available habitat for the red panda. Status: Endangered

Fun Fact: Like the giant panda, the red panda has a false thumb which is eally an extension of the wrist bone.

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