



## Educator's Guide to Rainforests! Classroom Program

Discover the dynamic world of tropical rainforests while you meet beautiful jungle animals. Live animals from each level of the forest will be featured along with stories of survival in this fascinating and endangered environment. Animals you might meet include boa constrictors, geckos, frogs, giant cockroaches, a tegu, and more! Our classroom programs are best for groups of 20-30 children.

Tropical rainforests are the most biologically diverse terrestrial ecosystems on our planet. More species of trees, plants, insects, reptiles, birds and other animals are found in tropical rainforests than any other place except, perhaps, tropical coral reefs. In this program, you will meet a variety of animals that live in tropical rainforests and learn how each animal is adapted to this habitat. We will also discover how the rainforest is divided into layers and learn how animals survive in these different layers. We will learn why tropical rainforests are important for animals and for all of us.

### Species you might meet in this program:

(7-11 animals in the 30-minute show; 10-15 animals in the 45-minute show)

Carpet Python	Fat-tail Gecko	Crested Gecko	Bullfrog
Cane Toad	Australian Tree Frog	Red-Eyed Tree Frog	Dumeril's Boa
Giant Day Gecko	Hermann's Tortoise	Chameleon	Tarantula
Tomato Frog	Blue Tree Monitor	Stick Bugs	Argentine B&W Tegu
Hissing Cockroaches	Ball Python	Rainbow Boa	Rat Snake

For detailed information about each animal, visit our website: [www.PrairieExotics.ca](http://www.PrairieExotics.ca) and click on "Collection". You will find information on the animals we keep as well as a picture album of each.

One 30 minute show: **\$100**; each additional back to back show: **\$75**

One 45 minute show: **\$125**; each additional back to back show: **\$100**

\*You can book combinations of 30min and 45min shows and still receive discount on additional shows

\*A 25% non-refundable deposit is required at time of booking.

### What is a tropical rainforest?

Tropical rainforests are located near the equator, so they stay hot all year – there is no "winter" as temperate regions experience. Rainforests receive 85 inches or more of rain each year, but there may be a "dry" and "wet" season. High humidity, constant warmth, lots of sunshine, and loads of rain promote plant growth year round. Trees become enormous!

Scientists divide the rainforest into different levels:

The **emergent layer** is where the tallest trees (over 100 feet tall) break free of the canopy. In these towering tree tops live animals such as the majestic harpy eagle and the beautiful bird of paradise.

The **canopy** is where most of the action in the rainforest is happening. This is where all the tree branches have grown together to form a habitat for animals such as: monkeys, macaws, iguanas, tree frogs, prehensile tail skinks, carpet pythons, and other interesting animals.

The **under story** is where all of the little trees are trying to grow and break through the branches above them. These trees may be very old even though they are small. You can find baby boa constrictors, geckos, and insects here.

The **forest floor** is at ground level. This is a very dark, twilight zone area – even in the day - because the branches and leaves above block out most of the light. In a mature rainforest, the forest floor is open and easy to walk through since plants have a hard time growing in such low light. The soil is very thin, but covered in a layer of decaying leaves that have fallen from above. Since the soil is very thin, the trees have big roots above ground called buttress roots. Animals such as giant toads, tegu lizards, and cockroaches are found here.

Running through the forest is the **river**. The biggest river in the world is the Amazon River, which is in the biggest tropical rainforest in the world – the Amazon Rainforest. (The Nile River is longer, but it does not carry as much water.) Periodically, the rivers will flood into the forest, and river animals like piranha fish, turtles, and caimans will swim through the trees.

### **Where are tropical rainforests?**

Tropical rainforests are found near the equator in: Africa, Asia, Australia, Central America, and South America. They are also found on numerous tropical islands including: Madagascar, New Guinea, Puerto Rico, Hawaii and others. Temperate rainforests (rainforests that are cool and might even have “winter”) are located around the world including North-Western North America. The largest tropical rainforest is the Amazon rainforest in South America.

### **Vocabulary words you might hear during the Rainforests! show:**

- **Adaptation:** characteristics and behaviors that help an animal or plant survive
- **Amphibian:** ectothermic, vertebrate animals (frogs, salamanders & caecilians) that typically have moist, slimy skin, usually lay jelly-like eggs in water, and go through metamorphosis to become adults.
- **Buttress Roots:** large, wide roots that anchor tall trees in the thin, tropical rainforest soil.
- **Canopy:** the part of the forest where the tree branches have grown together.
- **Carnivore:** an animal that eats other animals.
- **Conservation:** protecting natural resources.
- **Deforestation:** to clear a forest of all trees and vegetation.
- **Decomposer:** animals that eat decomposing or rotting plants, animals, and animal wastes.
- **Dewlap:** a flap of skin under the chin of certain species of lizards (such as iguanas) used for communication.
- **Ectothermic:** (cold blooded) an animal that has a body temperature dependent on the temperature of the environment (reptiles and amphibians are ectothermic).
- **Emergent Layer:** the few very tall trees that stand out high above the canopy.
- **Endothermic:** (warm blooded) an animal that has the ability to maintain its temperature above the temperature of the surrounding environment (mammals and birds are endothermic).
- **Forest Floor:** a dark area where very little growth occurs usually covered with fallen leaves, flowers and twigs.
- **Habitat:** a combination of climate, plants, geology and other factors combined to create an animal species' home.
- **Herbivore:** a plant-eating animal. Iguanas and tortoises are herbivores

- **Humid:** moist or damp air.
- **Invertebrate:** an animal that does not have a backbone or spine.
- **Natural Resources:** material supplied by nature.
- **Niche:** the position or function of an organism in a community of plants and animals.
- **Nocturnal:** animals that are active at night and sleep in the day
- **Photosynthesis:** the ability of plants and certain other organisms to create complex organic materials (including sugar) by using sunlight, water, carbon dioxide, and inorganic salts.
- **Poisonous:** an organism that contains a substance that can cause irritation, illness, or death if another organism handles or eats it. Most amphibians are poisonous.
- **Reptile:** ectothermic, vertebrate animals (snakes, lizards, crocodilians, turtles, tuataras) that have dry, scaly skin and lay eggs with a shell or give birth to live young.
- **Species:** groups of plants or animals that reproduce young like themselves.
- **Territory:** an area within a larger environment that an individual protects from invasion from others of the same species. Iguanas will fight to protect their territory.
- **Tropics (tropical):** region of our planet lying between the Tropic of Cancer and the Tropic of Capricorn, 23-27 degrees north or south of the equator.
- **Under story:** the forest layer beneath the canopy that is very shady, so the plants and trees are usually very small.
- **Vertebrate:** an animal with a backbone or spine.

If you have any questions please call Prairie Exotics at **204.782.0296**. You can also visit our website [www.PrairieExotics.ca](http://www.PrairieExotics.ca) or feel free to [EmailUs@PrairieExotics.ca](mailto:EmailUs@PrairieExotics.ca)!