

*theinnatdunvilla.com Information about the Amazon rainforest, its people, places of interest, and how everyone can help. Conference: Climate change and the fate of the Amazon. Podcasts of talks given at Oriel College, University of Oxford, March ,*

The women of the tribe fought alongside the men, as was their custom. It appeared following a global reduction of tropical temperatures when the Atlantic Ocean had widened sufficiently to provide a warm, moist climate to the Amazon basin. The rainforest has been in existence for at least 55 million years, and most of the region remained free of savanna -type biomes at least until the current ice age , when the climate was drier and savanna more widespread. Climate fluctuations during the last 34 million years have allowed savanna regions to expand into the tropics. During the Oligocene , for example, the rainforest spanned a relatively narrow band. It expanded again during the Middle Miocene , then retracted to a mostly inland formation at the last glacial maximum. During the mid-Eocene , it is believed that the drainage basin of the Amazon was split along the middle of the continent by the Purus Arch. Water on the eastern side flowed toward the Atlantic, while to the west water flowed toward the Pacific across the Amazonas Basin. Analyses of sediment deposits from Amazon basin paleolakes and from the Amazon Fan indicate that rainfall in the basin during the LGM was lower than for the present, and this was almost certainly associated with reduced moist tropical vegetation cover in the basin. Some scientists argue that the rainforest was reduced to small, isolated refugia separated by open forest and grassland; [11] other scientists argue that the rainforest remained largely intact but extended less far to the north, south, and east than is seen today. The dust contains phosphorus , important for plant growth. The yearly Sahara dust replaces the equivalent amount of phosphorus washed away yearly in Amazon soil from rains and floods. CALIPSO has measured variations in the dust amounts transportedâ€” an 86 percent drop between the highest amount of dust transported in and the lowest in A possibility causing the variation is the Sahel , a strip of semi-arid land on the southern border of the Sahara. When rain amounts in the Sahel are higher, the volume of dust is lower. The higher rainfall could make more vegetation grow in the Sahel, leaving less sand exposed to winds to blow away. Based on archaeological evidence from an excavation at Caverna da Pedra Pintada , human inhabitants first settled in the Amazon region at least 11, years ago. For a long time, it was thought that the Amazon rainforest was only ever sparsely populated, as it was impossible to sustain a large population through agriculture given the poor soil. Archeologist Betty Meggers was a prominent proponent of this idea, as described in her book Amazonia: Man and Culture in a Counterfeit Paradise. She claimed that a population density of 0. It is believed that the civilization was later devastated by the spread of diseases from Europe, such as smallpox. The development of this fertile soil allowed agriculture and silviculture in the previously hostile environment; meaning that large portions of the Amazon rainforest are probably the result of centuries of human management, rather than naturally occurring as has previously been supposed. Among those were evidence of roads, bridges and large plazas. Wet tropical forests are the most species-rich biome , and tropical forests in the Americas are consistently more species rich than the wet forests in Africa and Asia. One in ten known species in the world lives in the Amazon rainforest. The region is home to about 2. To date, at least 40, plant species, 2, fishes , [32] 1, birds, mammals, amphibians, and reptiles have been scientifically classified in the region. Scientists have described between 96, and , invertebrate species in Brazil alone. Leaves expand during the dry season when sunlight is at a maximum, then undergo abscission in the cloudy wet season. These changes provide a balance of carbon between photosynthesis and respiration. Among the largest predatory creatures are the black caiman , jaguar , cougar , and anaconda. In the river, electric eels can produce an electric shock that can stun or kill, while piranha are known to bite and injure humans. There are also numerous parasites and disease vectors. Vampire bats dwell in the rainforest and can spread the rabies virus.

## Chapter 2 : Peruvian Amazonia - Wikipedia

*Amazon Rainforest, large tropical rainforest occupying the drainage basin of the Amazon River and its tributaries in northern South America and covering an area of 2,, square miles (6,, square km).*

Macaws Macaws Macaws are large colorful parrots. They live high in the trees, feeding on fruit and nuts, which they crack with their powerful bills. Black caiman Black caiman Caimans are relatives of crocodiles and alligators. They are powerful predators, spending most of their time in the water. They eat fish, but may also seize land animals that come to the water to drink. Giant otter Giant otter The giant otter grows up to 5ft 1. It lives on river fish, including piranha. Jaguar Jaguar A powerful predator, the jaguar prowls the forest floor in search of prey. It mostly hunts at night, and can even kill and eat a caiman. Toco toucan Toco toucan Toucans are known for their large, colorful beaks, which they use to pick fruit. They also sometimes eat small animals. Paca Paca Pacas are expert swimmers. They live in burrows up to 10ft 3m deep, and come out at night to look for food. Green iguana Green iguana Most lizards are meat-eaters, but the iguana eats plants. It climbs high into the trees to find leaves, fruit, and flowers. Piranha Piranhas are meat-eating fish with strong jaws and sharp teeth. Emergent layer Emergent layer The tops of the tallest trees poke up above the rest of the forest. This level of the forest is called the emergent layer. Canopy Canopy The tops of the trees form a thick layer of leaves and branches called the canopy. Understory Understory A loose layer of smaller trees grows underneath the canopy. This level of the forest is called the understory. Forest floor The forest floor is shaded by the canopy, and few plants grow here. Harpy eagle Harpy eagle This powerful eagle preys on monkeys and sloths, grabbing them from the branches with its strong talons. Howler monkey Howler monkey These leaf-eating monkeys live in the treetops. They get their name from their incredibly loud calls, which echo through the forest.

## Chapter 3 : Amazon rainforest - Wikipedia

*The rain forest is made up of four layers: emergent, upper canopy, understory, and forest floor. Emergent trees grow far apart and tall, their branches reaching above the canopy.*

Altogether there are nine nations that enjoy all that the Amazon rainforest has to offer. The Amazon rainforest has existed for at least 55 million years. The Amazon rainforest is home to a very diverse range of species, many of which are not found elsewhere in the world. Interesting Amazon Rainforest Facts: The Amazon rainforest is a moist, broadleaf forest. It covers most of the Amazon Basin in South America. The basin is 2. If the Amazon rainforest was a country, it would rank 9th in size. The nine nations that have the Amazon rainforest in their borders are: The Amazon rainforest is home to of the bird species in the world. There are over 40, different plant species and approximately 2. Due to efforts to fight deforestation in the Amazon, rates have been reducing slightly, but it is still an issue today. The droughts in and destroyed huge amounts of vegetation in the areas worst affected. There are approximately 10 million species of animals, plants and insects known to man and more than half of them call the rainforest home. There are approximately fruits that grow in the rainforest that are edible. Many plants around the world have medicinal qualities. In there were between 6 and 9 million Amazon natives. Today there are only an estimated , left. There are approximately different languages spoken by the Amazon natives. It is believed that there may still be as many as 50 Amazon native tribes living in the rainforest that have never been in contact with the rest of the world. There are many dangerous species of snakes, spiders and animals in the Amazon rainforest. It is also home to the anaconda. The Amazon River is considered to be the life force of the Amazon rainforest. The toucan is the loudest creature in the Amazon. You can hear it as far as a half mile away. There are vampire bats in the Amazon rainforest as well as poisonous dart frogs. If you were caught in the rain in the Amazon you would have about 10 minutes to find your umbrella. The trees are so tightly packed that it can take 10 minutes for the rain to reach the ground below.

**Chapter 4 : 10 Best Amazon Tours & River Cruises - Rainforest Trips to Ecuador, Peru, Bolivia & Brazil**

*The Amazon River Basin is home to the largest rainforest on Earth. The basin -- roughly the size of the forty-eight contiguous United States -- covers some 40 percent of the South American continent and includes parts of eight South American countries: Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana, and Suriname, as well as French Guiana, a department of France.*

The Amazon Rainforest is home to over 2, species of animals. Some are found in the trees like the Gold Lion Tamarin, while others are found in the amazon rainforest river like the dolphin. A golden lion tamarin in the Amazon Rainforest in Brazil. The Amazon Rainforest, also known as the Amazonia or the Amazon Jungle, is the largest rainforest on earth and is home to mammals e. The Amazon consists of several ecosystems and vegetation types and is very species-rich. One in ten known species in the world lives in the Amazon Rainforest as do one in five known bird species. It is home to about 2, birds and mammals and here we will discover a few well known species currently living in the Amazon Rainforest. Capybara The Capybara is similar in appearance to cavies and guinea pigs. Barrel-shaped and covered in dark red and brown fur, adult capybaras stand around 2 feet tall at the shoulders on all fours, are in excess of 4 feet long, and may weigh close to pounds, making them massive for rodents. Semi-aquatic rodents by nature, they make themselves quite at home amidst the Amazonian wetlands. Giant Anteater As their name implies, this variety of sloths loves to chow down on bugs, including ants. In fact, their tubular snouts and long tongues are especially well-suited for gorging upon insects practically wherever they may be. Also unique among anteaters and sloths in general, Giant Anteaters prefer to stay out of the trees and stick to the rainforest floor to roam in search of their next insectivorous meal. Green Iguana The green iguana is a favorite pet of many people around the world. A large lizard, Green Iguanas may grow to almost 6 feet in length from head to tail. Harpy Eagle These beautiful raptors live across much of Central America in addition to the Amazonian jungles. Despite being skilled hunters and apex predators, they face significant threats from human activities, especially those related to habitat loss as large swaths of the Amazon Rainforest are cleared for land development. Sexually dimorphic and weighing up to 20 pounds, female Harpy Eagles may be twice as large as their male companions. Golden Lion Tamarin This bizarre animal is actually a monkey that derives its name from the great cats because of its impressive mane. It is comprised of abundance thick rings of beautiful golden hair surrounding its respectable and charismatic black face. The Golden Lion Tamarin can grow 6 to 10 inches long, while its tail can be even longer at 12 to 15 inches! Females often give birth to twins where the male fathers play a critical role in caring for the babies, carrying their offspring on their back in between feedings. They sleep in tree holes during the night and is active during day time, living in groups of 2 to 8 which constitutes their families, and make use of scent marks or songs for making their presence known on their territories. The Anaconda can grow as long as 30 feet and weigh up to pounds! They constantly grow throughout their entire lifetime, eating about 40 pounds of prey every day as small meals. Larger meals that they swallow whole can satisfy them for a few weeks. A female anaconda is typically larger and gives birth to live young which count 20 to 40 little anacondas that are each 2 feet long! Peanut Head Bug Also known as the lantern fly, flying snake, alligator bug, snake cicada, among many other names, the peanut head bug is a mysterious creation. Weird as it looks, this insect has a head that closely resembles an unshelled peanut! It has an enlarged head with a bulbous protuberance popping out of it. Scientists are uncertain of what its purpose is. Truth is, the peanut head bug would be apparently defenseless in itself and is simply a harmless plant-hopper. Glass Frog As its name implies, the skin of the glass frog is translucent though it is mostly lime green. You can actually see its abdomen, heart, liver, and various other organs if you care to look, as if you have been granted X-Ray vision! Glass frog tadpoles freely flow from the trees and fall directly into the water upon hatching. Jesus Lizard The Jesus lizard was given its name thanks to its ability to run on water. Catholic explorers found it similar to the Gospel story of Jesus who walked on the waters of the Sea of Galilee. When fleeing from predators, it can literally run on the surface of water such as a pond or stream at a speed of 5 miles per hour, and for up to a distance of 20 meters. This common basilisk can do this incredible stunt with

its toes that possess a special webbing, allowing it to stand upon its two hind feet. **Kinkajou** The kinkajou, a relative of the raccoon, has a furry golden skin and a tail designed to grip branches. More commonly known as bear-monkey, honey bear or lion monkey, the Kinkajou is rarely seen because it is a nocturnal creature who clings on the top of trees. They use their 5-inch long tongues to pick ripe hanging fruits. They love to drink the nectar of flowers and have a diet consisting of 90 percent fruits. Even still, they are considered carnivores. They are sometimes kept as pets although they can carry the roundworm parasite. **Sloth** One of the most unusual animals on earth, the Sloth, is known for being a very slow animal. This mammal is slow-paced in everything, from its movement which entails sleeping for 10 hours a day and moving only as necessary. It can take their bodies a month to digest food! Their body temperature is low at only 86 degrees Fahrenheit merely 30 degrees Celsius. **Poison Dart Frog** The poison dart frog, contrary to its name, may not be deadly at all, as only 3 species are actually lethal, of which the golden poison arrow frog is the most dangerous. Set aside this possibility, they look vibrant and attractive arriving in a myriad of colors including the aforementioned gold, yellow, red, copper, green, black or blue which they utilize in a tactic to ward off predators called aposematic coloration. **Amazon River Dolphin** The most famous inhabitants of the Amazon River is no other than the Amazon River Dolphin, or Boto, who looks pretty in pink and can grow larger than human size! Their distinct color is said to be due to their blood capillaries being located near the surface of their skin. **Macaw** Native to the jungles of South America, Macaws are social birds usually seen traveling in flocks in sizes of 10 to They are loyal to their lifelong mates. They are beautifully colored birds that hold a vibrant plumage. Their beaks are quite powerful and can effortlessly crack nuts and seeds, while their scaly tongues are dry and contains bone, which is mostly used for tapping into fruits. Some macaws can even mimic human speech! **Jaguar** Thought to be the real king of the jungle, the jaguar is the largest cat in the Americas, though it ranks third in the entire world, behind only the lion and tiger. Their spots, which highly resemble roses, render them distinctive from other big cats, A jaguar has the strongest bite force of all of these predatory felines, with its incredibly powerful jaws incomparable to those of any other cat. This animal is a solitary killer, and will typically scale and climb trees to use as a vantage point when hunting prey prior to pouncing upon their targets. This page was last updated on January 26, By Jessica Dillinger Which animal do you find to be the most fascinating? Here are the results

*Visit theinnatdunvilla.com to learn more Introduce your students to the layers of the rainforest and the animals who live there. Explore the adaptations.*

Demography[ edit ] Although it is the largest region of Peru, the Peruvian Amazon is the least populated. Many indigenous peoples , such as the Aguaruna , Cocama-Cocamilla and the Urarina , [2] inhabit the jungle, some in relative isolation from the rest of the world. The primary cities located in the Peruvian Amazon include: Moreover, illegal deforestation might lead to more violent crimes. This has already been demonstrated on 1 September , when four indigenous leaders were murdered, including the famous environmental activist Edwin Chota. These leaders were asking for governmental protection against illegal loggers, after being threatened several times. Partly due to this, illegal loggers are being blamed for the assassination. Soon however, big logging companies started paying individual loggers for the use of their contracts and established an illegal, large-scale logging industry. In Peru modified the Forestry and Wildlife Law in order to improve the logging sector. To some extent this can be explained by the fact that Brazil illegalised the exports of mahogany one of the most valuable and endangered types of wood in the world from on. Soon after the ban, international institutions revealed their severe concerns about the state of the Peruvian timber industry. Albeit the fact that from then on, one needed special permits for harvesting and exporting any endangered species, the forestry sector was still far from sustainable. Illegal logging with permits[ edit ] Although it is understandable that illegal logging cannot be stopped easily in the Peruvian Amazons an inaccessible area bigger than Spain , the illegal exportation of timber is supposed to be more difficult; the shipments are huge and there are very few routes from the Amazons to the coast. Nevertheless, until now it has been relatively easy for companies to ship and export illegal timber. Despite the fact that the Peruvian government claims that it does not know anything about the method used by these companies, it is common-knowledge. According to them, the biggest flaw in the Peruvian system for years has been the granting of logging permits: There are only two ways to stop illegal loggers: With not more than a hundred environmental prosecutors in Peru, it is not surprising that both methods are far from effective. On the one hand proponents claim that the forestry sector experienced significant improvements. Some small improvements are indeed visible. Next to this, US officials started training Peruvian law enforcement officers, although only on a minor scale. As only very few types of timber fall under this legislation, the real percentage of illegally harvested timber in Peru is assumed to be significantly higher. Illegal gold mining[ edit ] Illegal gold mining is rampant among the Madre de Dios Region of Peru, and is extremely harmful to the environment. With the Interoceanic Highway available, "30, miners are estimated to be in operation without legal permits. The harmful impacts of gold mining in Madre De Dios can be seen from space. While the land is potentially oil-rich, there are also many indigenous peoples living within the Amazon rainforest. The Camisea Gas Project on Lot 88 impacts the daily lives of indigenous residents. These roads then become catalysts for other illegal industries such as logging and gold mining [28] The plot of land where Camisea is located is on one of the most highly prioritized areas for biodiversity and conservation. Additionally, only seven percent of the oil blocs in the Western Amazon have been extracted, so there is potential for further illegal exploration in undiscovered areas.

### Chapter 6 : Trees of the Amazon rainforest - in pictures | Environment | The Guardian

*The Amazon Rainforest, also known as the Amazonia or the Amazon Jungle, is the largest rainforest on earth and is home to mammals (e.g. the jaguar, sloth, and river dolphin), 1, birds (like the macaw), reptiles (e.g. anaconda or the Jesus lizard), and more than amphibians (e.g. glass frog and poison dart frog).*

There are amazing animals and creatures and so much to see that it would astound you. Read on for cool facts about this awesome place. It travels across nine different countries. It is the largest rainforest in the world. Not surprising when you think about how big it is. If it were a state, the Amazon Rainforest is so huge that it would have been the 9th biggest country as a whole. The Amazon rainforest has been around for at least 55 million years. This is definitely the place to go exploring, to see what you can find. There are over 2. Very little sunlight makes it down there as there is a massive big canopy of trees that cover the top of the rainforest. If it started raining, it would take 10 minutes for you to get wet! With all those 40, species of plants, can you imagine how many more medicines and vaccines could be found to help people? There are about 50 tribes that are native to the Amazon Rainforest that have never had any contact with the outside world at all! Wow, they would probably get a big shock if they ever had to come into contact with the modern world as we know it today. In there were between 6 and 9 million Amazon natives. Today there are only an estimated , left. The Amazon natives speak about different languages. If you go exploring, keep a sharp lookout for some dangerous animals like anacondas, cougars and jaguars! You can hear them from almost 1km away. The tribeswomen and men fought together, so Orallana called them Amazons after the fierce female warriors from Greek mythology. Think he must have been pretty scared! It can add up to 10m a year. That is the same height as a three-story building! No wonder they call it a rainforest! At different times of the year the Amazon River can be km wide. The amount of water that flows from the Amazon River into the Atlantic every single day is enough water for all the people of New York City, for an astounding 9 years! The last years have seen the rainforest being destroyed at about 1. Yes, you read right, per second. This is really sad, as all the forests continue to be cut down, rainforest species are destroyed every single day! How many species will become extinct? Scientists think about 50, per year! This is very cool. It is 6,km long and between to m wide, which is wider than the mouth of the Amazon River. But where in the world is this river? The Amazon Rainforest is a very precious place on Earth, and we need to protect it to make sure it survives for years to come.

## Chapter 7 : Amazon Rainforest

*Amazon rainforest. Fears for Amazon as Bolsonaro plans to merge environment and agriculture ministries A new study finds that warming in the Atlantic Ocean is changing rain patterns in.*

Biodiversity[ change change source ] Aerial roots of red mangrove on an Amazonian river Wet tropical forests are the most species-rich biome , and tropical forests in the Americas have more species than African and Asian wet forests. More than one-third of all species in the world live in the Amazon rainforest. This is the largest collection of living plants and animal species in the world. One in five of all the birds in the world live Here. To date, an estimated , species of plants of economic and social interest have been registered in the region with many more remaining to be discovered or cataloged. Brazil has tight laws against telling about these species, but enforcing these laws is a problem. Amazonian forests as a store of carbon dioxide[ change change source ] A river in the Amazon rainforest More than one fifth of the Amazon rainforest has already been destroyed. The forest which remains is threatened. People who care for the environment warn about the loss of biodiversity. They also point out that releasing the carbon which is stored in the trees will increase global warming. Conservation[ change change source ] Environmentalists are concerned about loss of biodiversity due to the destruction of the forest, and about the release of the carbon in the vegetation , which would accelerate global warming. Obviously, this can only be done once; it is not sustainable. Not all people agree on the study; some have questioned the assumptions behind it. The Brazilian Air Force has been using surveillance aircraft to monitor the forest. At a conference in , scientists warned that the rainforest will no longer be able to absorb the millions of tons of greenhouse gases annually, as it usually does, because of the increased speed of rainforest destruction. In Brazil alone, European colonists have destroyed more than 90 indigenous tribes since the s. With them have gone centuries of knowledge of the medicinal value of rainforest species. As their homelands continue to be destroyed by deforestation, rainforest peoples are also disappearing. Rubber boom[ change change source ] Once the process of vulcanization was invented, companies began to make many kinds of new rubber products, such as boots and seals for machines. American and European companies began buying large amounts of latex from Brazil. This boom in Brazilian rubber began around , but the need for automobile tires brought the greatest wealth to the new rubber producers. However, the trees could not be farmed on plantations because if they were next to each other, the insects would eat them. Therefore, people had to find the trees in the rain forest, cut slits in them, leave cups to collect the latex, and come back later to get it. Most of these people were hired by rich rubber merchants. The rubber merchants loaned them money to come down the river and buy tools. That meant the collectors were always in debt to their merchant and could not leave to do something else. The rubber merchants quickly became very rich. The center of the rubber trade was Manaus on the Rio Negro. It had electricity before most of the cities in the United States did. They built a magnificent opera house with crystal chandeliers and decorated tiles brought all the way from Europe. The trees grew well there, and they could be grown on plantations. The insects that could destroy them were in South America. So the price of rubber began to fall, and the rubber boom stopped.

## Chapter 8 : What Animals Live In The Amazon Rainforest? - theinnatdunvilla.com

*Rainforest Cruises is a boutique travel company specializing in Amazon river cruises, Galapagos Islands tours, and Southeast Asia cruises. We provide you with the finest collection of cruises in Peru, Brazil, Ecuador, Bolivia, Panama and Southeast Asia.*

## Chapter 9 : Amazon Rainforest Facts for Kids

*The Amazon Rainforest is located in 9 different countries but the majority of it (around 60%) is located in Brazil. The rest of it can be found in Peru, Colombia, Ecuador, Bolivia, Venezuela, Guyana, Suriname and French Guiana (which is*

*technically an overseas territory).*