

Forests

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Temperate Forests

http://www.globio.org/glossopedia/article.aspx?art_id=3

Temperate forests are found in both the southern and northern hemisphere. What distinguishes a temperate forest from other forests is its four dissimilar seasons. And although their winters are definite, temperate forests are labeled to have a moderate climate. Temperate forests are also home to a variety of different plants and animals. Among the trees found in these forests, there are deciduous trees, coniferous trees, as well as broad-leaved evergreen trees. The temperate forests are also home to many animals we are most familiar with, including bears, deer, possums, rabbits, and several smaller birds. They are even considered a home for us. The chances are, if you don't live in a tropical region, you are probably living where a temperate forest once grew.



The information just covered would be very useful in engaging students in a lesson on forests, primarily to relate them to the topic. Furthermore, I find it to be useful for any elementary grade level. The content is enough to form all sorts of lesson plans, as it is also great in finding common ground between day-to-day life and science. For example, you can use the information on this site to show how the temperate forests impact our own lives; how the animals we see live there, how we live there, and the specifics therein. Beyond the easily



transferrable content, this page is very easy to navigate for you and your students alike. It is also interesting enough to look at, with pictures and web layout, that you and your students could retain interest in the topic. Conversely, however, the information on this site is not very specific, limiting the depth in which you can use it. Regardless, I highly recommend this site to whomever

wishes to teach elementary students about temperate forests.

Article: Tropical Deforestation

Tropical deforestation is a major problem in the world today. Rainforests make up 7 percent of the world's forests but are a home to about half of the world's species. There are some species that are only located in small microclimates in the forests (Lindsey 2007).

This can cause an increase in extinction when their habitats are wiped out by deforestation. Certain species cannot handle the change that comes with losing their habitat and simply die off. There are many causes to deforestation but the number one cause is from humans cutting them down to use for resources. Many countries have already gone too far and harvested as much as 60% of their forests (Lindsey 2007). This is an important topic because its impacts can affect the entire world.



This would be a good topic to talk about in a classroom because students need to see the effects of careless deforestation. The grade level would be around 4th or 5th grade. This could be adapted for younger grades though. The older the students are, the more in depth they can go into the issue.

There are many negative effects when deforestation completely wipes out a forest region.



The plants, animals and people do not handle the change well and nothing good comes from it. As a teacher, you can first talk about different types of forests and what positives they can offer and then talk about what negatives can happen when those forests are depleted. You can then lead into a discussion about limiting paper usage and even starting a classroom recycling campaign. They can involve just the class or get the whole school to be a part

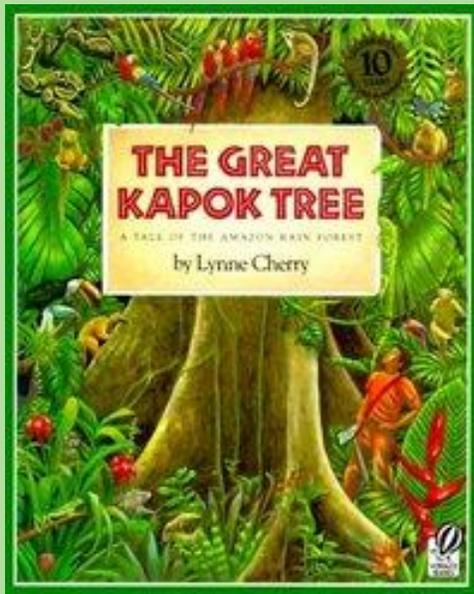
of it. There are many different ways that they can look at the problem in order to find a solution that can help ease the conflict. Allowing your students to come up with their own ideas is a very beneficial way to get them involved.

The Great Kapok Tree: A Tale of the Amazon Rain Forest

By Lynne Cherry

"And in this steamy environment the great Kapok tree shoots up through the forest and emerges above the canopy"- The Great Kapok Tree

The Great Kapok Tree: A Tale of the Amazon Rain Forest by Lynne Cherry is a beautifully illustrated picture book about the importance of preserving the rainforests. The story is of a man who comes to the Amazon with the intention of cutting down a beautiful kapok tree. However, the animals of the rain forest (snakes, bees, monkeys, birds, frogs, and a jaguar) manage to change his mind. The character sees the importance of the tree to the rain forest and how destructive it would be to chop the tree down. The book also includes illustrated maps of the world's rainforests, especially those that are endangered. These maps would be beneficial in giving children visual representation of the endangered forests throughout the world.



This book would be perfect to read with younger grades but even older children would enjoy the rich illustrations and the enchanting storyline. The pages contain intricate and unique border illustrations, some even depicting the animals of the rain forests. Cherry's book would be perfect to use when studying ecosystems, sustainability, and endangered parts of the world. It would be a great book especially for a lesson on the causes and effects of endangered rainforests. The book could also be used for artistic purposes to give students an idea of how to illustrate work for class, as Cherry's illustrations are unique and inspiring. The

illustrations really make this book a one of a kind resource to be used in the classroom.

This book can easily be found online or at local bookstores for around \$10-\$15.

Image retrieved from: http://www.goodreads.com/book/show/537111.The_Great_Kapok_Tree

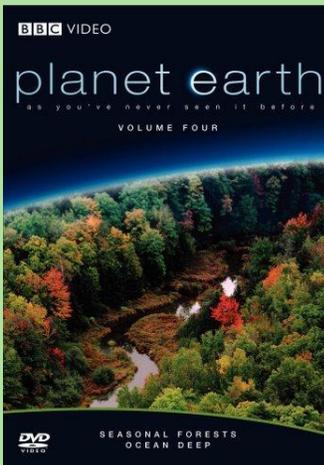


Resource – “Life” documentary series by Discovery Channel – click picture for video link

Summary of Resource: The Discovery Channel has been bringing audiences closer to the wilderness and to animals in the world around us for years. It is a widely known and reliable source for any and all looking to discover the world around them. Discovery Channel has provided a plethora of information to those interested in a variety of topics. As a follow up to their ever successful series, “Planet Earth”, in 2006, the Discovery Channel went one step further in their 2010 series “Life”. While “Planet Earth” was designed to take audiences to some of the most incredible places on the planet, “Life” is taking you back to these places and introducing you to the extraordinary animals that live and survive there. The producers of this series did an astounding job of capturing the life of animals on film, and really relaying it to the audience as if they were witnessing it firsthand.

Benefits/Weaknesses: There are multiple episodes from this series that can prove to be a beneficial resource when studying forests. It is very informational, and best of all, it is sure to capture the attention of any student. Unlike other dull documentaries that make students doze off in the classroom, “Life” will provide students with an abundant amount of information and detail surrounding the plants and animals inhabiting forests around the world while holding their interest throughout. After being introduced to information through a series such as this, students may be much more inspired to learn than if they were given this information through more traditional ways such as a book or article. The footage it covers can be used as a primary source of information, or used to back up and intensify material already introduced in another means.

Access: <http://dsc.discovery.com/tv/life/>



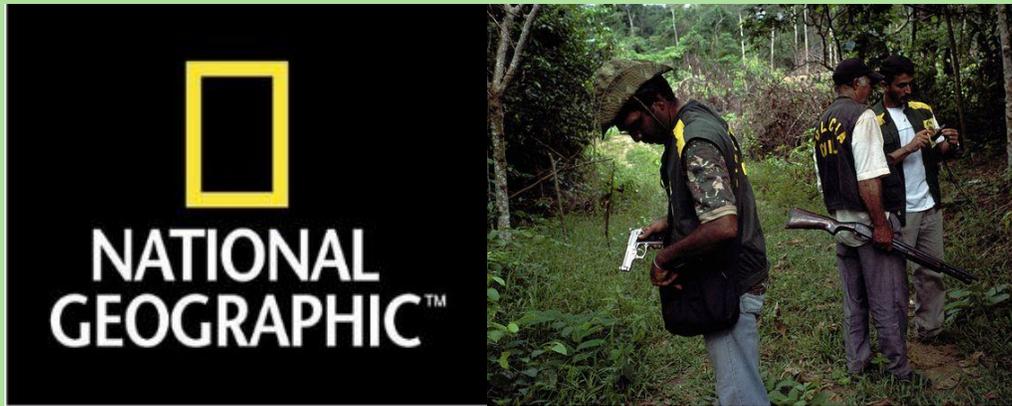
Resource - Forests: Towering Trees, Falling Leaves By Larry O’Hanlon

Summary of Resource: Forests are one of the most useful landscapes on this planet although they are reducing at a surprisingly fast rate. Throughout this article it is discussing the worlds largest Forests such as the Taiga, the Coast Redwoods, the Sequoias, and the Rocky Mountains among others. All of the Forests have very different characteristics such as the Taiga having “a cold, evergreen forest that is the largest single terrestrial biological zone on the planet” and also that Taiga is a large contributor in the seasonal changes in carbon dioxide levels in the entire atmosphere, although the Taiga is unable to keep up with the carbon dioxide humans have added in to the atmosphere. After the article discusses many facts about the Forests different environments, it addresses the fact that all future forests have two things in common; one is that “global warming is pushing their habitats pole ward, or shrinking what little habitat they have.” It also addresses that the more immediate threat is the demand for lumber that is making it so there is very little virgin forests left. And the battle for preserving these forests has only just begun.

Uses: I would use this article in my classroom for an older grade, as early as fourth grade. Although some of the article might be a little two advanced, reading it as a class and discussing it would be very beneficial in educating the students more about Forests, how important they are and what is happening to them. This would be a great opening article for the students to read before watching the episode from Planet Earth called, Forests (the series of shows that this article stems off from). After reading this article, the students’ attention will be caught and they will be eager to watch the episode to find out more about forests.

Strengths: This article has only strengths personally because I think it gives a great overview about forests that isn’t lengthy that gives the basic outline of the important pieces that students will learn more about in the Planet Earth video about forests.

Access: <http://dsc.discovery.com/convergence/planet-earth/guide/forests.html>



Resource – National Geographic article – Farming the Amazon

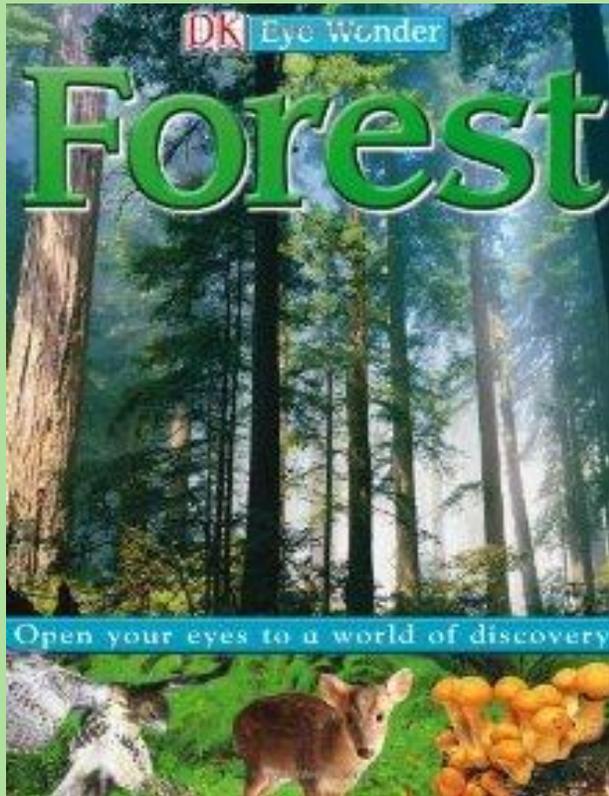
Summary of Resource: Over the past 40 years close to 1/5 of the whole Amazonian rainforest has been cut down. Many of this deforestation is thanks to logging throughout Brazil. Since the rainforest produces half of its' own moisture the loss of 20 percent of its tree population provides a big hit to its own future. A fear of this deforestation is that the loss of trees for timber will cause future droughts. One such drought already occurred in 2005 which reduced river levels up to 40 feet and left hundreds of communities without water. This vicious cycle is unable to stop as the forest is continuously harvested.

Another effect of this deforestation has been land wars and the death of hundreds of people from those who benefit from logging and the sale of timber. Roads that are created from logging have left a direct road for travel and stolen ownership by squatters, farmers and hired gunmen. These created gangs have proven deadly for communities surrounding the rainforest. The less than savory characters use the roads and then are able to easily cover their own tracks into the forest which was previously impossible to penetrate.

Strengths/Weaknesses: Strengths of this piece are that it provides a very different perspective of life in the Amazon than is normally given. It delves into the lives of the people in the surrounding communities and how the growth, harvesting and depletion of the Amazon rain forest effects them. Also like most National Geographic articles, it has great pictures that help the reader to understand the situation beyond the written word. The weaknesses of this piece is that the topic is a little heavy for those in the younger grades so it would work better in grade 5 and up. Although the reading level might be a little challenging for those in elementary school anyway so it may work better to use this piece in most cases in middle school and above.

Access: <http://environment.nationalgeographic.com/environment/habitats/last-of-amazon/#page=1>

Online Book



Lock, E., Publishing, K., & Mack, L. (2003). *Forest*. Dk Pub. Retrieved from <http://books.google.com/books/feeds/volumes?q=0-7894-9893-6>

Forests, by Eye Wonder books is a beautifully created piece of literature that describes many aspects of forests in a way that will be visually appealing and interesting for students of all ages. The detailed pictures are done using real-life photography in collage style to detail very specific aspects of forests and forest life.

Within this digital book is detailed information about all aspects of forests from the trees that stand sentinel over the abundant animal and plant life within it down to the fungi mold spores that create the smallest forms of life. This book summarizes every type of forest throughout the world from the gargantuan redwood forests of California, to the dense jungles and rainforests throughout the world, to the expansive pine forests of the North. The book details the abundant animal life found within forests from the king carnivores to the smallest insects.

This book is not available to buy in print form, but can be found easily on the internet. It can be found for free from <http://books.google.com/books/feeds/volumes?q=07894-9893-6>, but can also be found in a far more user-friendly format at teachervision.com (<http://teachervision.fen.com/forest-ecology/web-book/67504.html>). Teachervision is a paid website which mean a user would have to pay a nominal fee to see a book such as this, but the format is far more user-friendly and easy to use. It is also a far more student-friendly format, and very engaging for students so as to promote technology and technological cognition in the classroom.

There are no specific lesson plans found within *Forests* because the book is meant for learning use more than teaching. A capable teacher should have no problem creating lesson plans based on information from the book, therefore making the book great for teaching as well as learning.

Rainforest Website: <http://kids.mongabay.com/>



The website: A rich resource full of information about tropical rainforests. This site is easy to use and has a very well organized layout for users to follow. The homepage has links under main topics which include, “about rainforests”, “rainforest animals”, “rainforest people”, “why are rainforests important?”, “why are rainforests disappearing?” and “how can we save rainforests?”. There is a main site *mongabay.com* that has valuable information as well, however, I like this website (*kids.mongabay*) better because all the information is directed at kids and easy for them to access. Almost every link that can be clicked on has pictures, articles, maps, or questions.

Uses in the Classroom: A teacher could use this in the classroom to show the students about the rainforest and give them great in-depth lessons on rainforests around the world. Students would also be able to use this site easily. I would aim for third grade or older to use it on their own because the site does have a lot of writing that younger students may not be able to read or follow the text. If a teacher did want to use this site for younger students then I would use the information from the site to create a PowerPoint presentation filled with pictures and bulleted information the teacher feels is most important for the students to know. Learning about the Rainforest is important for students because in many places around the world it is quickly disappearing before our very eyes. Students should be educated on the fascinating parts that make up the rainforest including animals living there, people that inhabit it, as well as the exotic plant life that it is made up of. Students could use the information from this website to create an informational poster for others to learn from, or even to put together a presentation to share with the class or other classes. The teacher could even have the students do a sort of i-spy or scavenger hunt on the site in order to answer questions and learn about the Rainforest.

Strengths and Weaknesses: This site is packed full of information the students could benefit from learning. Overall the strength of this website is that it is filled with information that is laid out in an organized way students can understand. A weakness is that although there are a number of pictures used, the site is heavily text based, which may be difficult for teachers of younger students to use in the class or have students use on their own.



Rainforest Alliance

Source: <http://www.rainforest-alliance.org>. Website

Grade: K-8

Description of Website: This site has games, activities, a virtual storybook, virtual rainforest visits, forest facts, and species profiles. The game section has three games. In "Jewels of the Earth", you go on a virtual trek through the rainforest and in "Track it Back" you'll see where some of our most popular foods come from: bananas, coffee and chocolate. The activities section has coloring pages of many different animals. It includes the scientific name and facts about that animal. There are seven virtual storybooks on this website. Some of these are stories of children that live in the rainforest. Others are fictional stories with information about rainforests woven in. The virtual rainforest section shows different slideshows of rainforests with a lot of written information about the pictures. The forest facts section has short articles regarding different rainforest questions and answers. The species profile give information on specific species and specific animals. It gives each animal's anatomy, habitat, diet, and threats. It is a very informative website that is easy to navigate.

There is also a section in this website for teachers. There are curriculums to teach about the rainforest from kindergarten to eighth grade. There are lessons for each grade starting with the differences in a forest and a rainforest. The upper grades include lessons on how to protect the rainforests. Each lesson has the instructional steps, standards, assessments and resources. The lessons have a great amount of detail and would be very beneficial.

Ways to use it: This website could be easily incorporated into the classroom. For the younger students could do the coloring page. The information would need to be explained to them by a teacher. Upper grades could use this site to do reports on different animals and aspects of the rainforest. It would be interesting to read the virtual stories to the class of any grade. The virtual tour would also be great tool to use to teach the entire class about rainforests. This site has age appropriate lessons for grades K-8. Overall I think that this website is a great resource for teachers and students.

The Rainforest Alliance Website: a Resource for both Teachers and Students

Resource: Rainforest Alliance website (<http://rainforest-alliance.org/>)



The Rainforest Alliance website is dedicated to providing accurate and educational information about rainforests around the world, as well as helping individuals to become more mindful about what they can do to make a positive impact and rehabilitate these threatened environments. The website can be found at the link above, and the initial interface is easy to navigate. By clicking on the *Teach and Learn* tab at the top of the page, one can find access to a variety of sub-pages, including a “Kids' Corner” page (in which interactive slide shows, online games, virtual storybooks, plant and animal facts, and printable activities can be found), a “School Curriculum” page (including lesson plans, articles, and presentations for teachers to peruse), and a “Green Your Classroom” page (which provides many fun and creative ways to turn a classroom into a setting that is more environment friendly).

The vast amount of resources and kid-friendly information found on the website make it an excellent one for teachers to utilize while completing a unit on rainforests. There are lesson plans available for every grade level, online games and activities designed specifically to help students learn about different aspects of rainforest life, and even ideas about how students can make simple changes in their daily habits to make a positive impact on the rainforests around the world, which is a great way to connect the material to students' lives.