

Webquest 1: Conservation groups, who are they and what do they do?

- Go to www.wwf.org and click on the United States (if you have time at the end you may go back and see what other country's websites look like and how they differ from our version).
- What are the main topics on the first page?
- Click on "Who we are." What are their mission/goals?
- Look to the right and see the pie graph? How much of their money goes where?
- Click on "History" on the left. When were they created and by who?
- Click on "What we do" at the top. Read the short information at each of the 4 topics and read more if you like by clicking the link.
- Click on "Places" at the top. Do any of their 19 priority places surprise you? Why? Chose a place or species and read about what the WWF does to help.
- There are many conservation groups that protest, try to prevent companies from doing business, or try to change a culture's practices. Some are www.earthtrust.org and www.greenpeace.org. Visit their websites and compare their strategies to what the WWF does. Why do you think the WWF is more recognized around the world by governments and local peoples?

Webquest 2: Some cultures live in close contact with endangered animals that are dangerous to people (such as lions, elephants and rhinos). How do conservation groups work with these people to explain that these animals should be protected?

- Go to <http://www.worldwildlife.org/species/humanwildlifeconflict.html> (If you finish early you can browse through the rest of this conservation group's website.) What are some ways that they work with the people? (Scroll through the whole page).
- Click on some of the PDF links to see the pictures attached to the reports.
- Go to www.lionresearch.org/main.html and browse to read about the problem and possible solutions. What are they?
- Also read www.livescience.com/animals/050621_ap_lion.html for a different take on animal/people relations.

Webquest 3: Drilling in Alaska and other places in the USA.

- For drilling: www.anwr.org. What does ANWR stand for?
- Click on the right "Top 10 reasons to support ANWR development" What are 3 arguments for drilling?
- Back on the main page click on the links for Background, Research, and Technology to find out: Why do they say animals won't be affected? What do they say about the cost of oil? How much area will be affected? How much oil is there?
- Go to www.safearcticrefuge.org. Click on the fact sheets and wildlife impacts to find out: How long will the oil from ANWR take to get to our gas stations? Will it affect our gas and oil prices? How much oil do they say is there? What do they say about oil spills? How often do they occur, how much is spilled and what are the effects? What are the effects on wildlife there (polar bears, caribou, migrating birds).

Webquest 4: The rainforest is disappearing. Why? What do we get from the rainforest? Who and what live there? Why is it important to save?

- Go to www.rainforest-alliance.org. Click on “Agriculture” and look at the list of crops on the left that we get from the rainforest. What are they?
- Go to www.rain-tree.com/facts. How much of the rainforest are we losing every day? Every year? How many species live there? Give examples. List at least 3 benefits of the rain forest. What did you learn about medicines from the rainforest? What did you learn about cancer treatments?
- Read about Action. Is it better to farm cattle, or use the land for timber, or keep it a forest and use native plants to grow sustainable crops to sell? Why?
- Go down to Driving Forces of Destruction. Give four reasons why the rainforest is being destroyed. Why should we talk to the native people of these places?
- Go to www.globalexchangestore.org. How do groups like this one support the rainforest and the people that live there? What can you buy from them?
- Go to www.ran.org for the Rainforest Action Network. Click on “Human Rights Issues”
- Click to learn more about supporting small family farms and plantation worker’s rights. Why are these a concern to conservationists and how does it support their cause?

Webquest 5: Heifer
International and Oxfam

- Go to www.heifer.org (close the popup, do not sign up). Click on “Our Work” and “Our Approach”. Click on the interactive “Explore the World of Heifer” and browse through the interactive links. What do they do and how do they do it? Give specific examples.
- Go back to the main page and click on the Interactive Map on the right. Choose a country (not the USA) and find out what Heifer is doing there. What do they do in the USA? How can this be considered “conservation”?
- Go to www.oxfamamerica.org. Click on “What we do” and click on Access to land, then Fisheries, then Water. What are they doing in each of these areas that can be considered as “conservation”?
- Back on the main page, what are they doing in our country?

Webquest 6: A supply of clean, fresh water is not always reliable in many areas. Where is this a problem? What environmental issues contribute to this? How are people, groups, and companies working to fix this? Can we get freshwater from saltwater?

- Go to www.csdw.org and follow the directions to clean the water.
- Click on “The Facts” at the bottom. How many children die because they do not have clean water to drink?
- Click on “Pur Packets at Work,” watch the video and read the information on the left.

- Go to <http://blueplanetrun.org/water>. Read the three paragraphs and then click on “Facts” on the left. How many people do not have clean water? What diseases are associated with contaminated drinking water?
- Under Geography, read the statistics. How much water do we have compared to others?
- Click on “Water is the 1st Step”. What can happen once a community has clean water to drink?
- Go to www.tampabaywater.org/watersupply/tbdesalprocess.aspx. Read through the process. What is desalination? Why do you think this process might be difficult for some countries?
- Go to www.feow.org and see all the ecoregions. Why would we be concerned with protecting water environment for animals and plants? How does that affect our drinking water?
- Go to www.thecoca-colacompany.com/citizenship/conservation_partnership.html and click on “Freshwater Fact Sheet” on the right. Why should businesses be concerned with water conservation?
- Go back and click on “Watersheds Fact Sheet” on the right. What is a watershed? In what areas are Coca Cola and the WWF focusing on and why are they in danger?

Webquest 7: What are indicator species? How can we raise awareness for them and the smaller, lesser known species? Why are charismatic megafauna, the “cute and cuddly” species used instead? Are the small species ignored?

- Go to www.epa.gov/bioiweb1/html/indicator.html. What is an indicator species? What are common ones?
- Click on one and explain why it is an indicator species.
- Click on www.ncwater.org/Education_and_Technical_Assistance/Stream_Watch/gallery.html to find out what is going on in our state. What is our main bio-indicator species? Why?
- Go to www.biodiversityhotspots.org. What is a hot spot?
- On the pull down menu click on Caribbean Islands. Read through where it is and what lives there. How many threatened mammals are there compared to amphibians and birds? If you were in charge of education people about why it is important to save this area, would you choose the salamander or the manatee as your “mascot”? Why?
- Click on “human impact” on the left. What have we done to this area that it is in such bad shape?
- Choose another region and do the same as above. What surprises you?
- Go to http://investigate.conservation.org/xp/IB/basics/basics_hotspots.xml and click on “Saving Biodiversity” at the top. Why is it important for us to conserve species?

Webquest 8: What is the role of zoos in conservation? What do they do and how do they do it (captive breeding, cloning, preserving DNA, releasing back to the wild)?

- Go to www.aza.org and click on “Conservation” on the left. The AZA is the Association of Zoos and Aquariums. They make sure these facilities maintain high

standards of animal care. Click on either amphibians, oceans, or elephants and summarize what the AZA does.

- Go to <http://nationalzoo.si.edu/ConservationAndScience/SciencePlan/mission.cfm>.

What do they do to help conservation?

- Click on “Endangered Species Science” on the left. What is their recovery plan for endangered species?

- Click on “Captive breeding populations” on the left. What are the goals of these programs (there are several)?

- Click on some of the animal species on the left. Why are they endangered and what is being done?

- Go to www.lairweb.org.nz/tiger/release2.html. Why is it so hard to release tigers? List all five reasons and explain them.

Excerpts from student papers:

Excerpt from the story “The Tree”:

...One thousand-five hundred years later, humans prospered, and the tree grew weaker. They sailed to distant lands, invented things that sucked up the Earth’s natural resources like a vacuum. They built smokestacks that obstructed beautiful natural panoramas that people use and keep sacred. Those infernal smokestacks spurted smog and other nasty things into the once clean air. The tree could feel the tiny flecks of dirt and coal through its leaves. Then man built automobiles, loud machines that made animals flee into the tree’s massive branches for safety. Man killed animals for sport, and then left them bleeding on the ground, laughing as they walked away in search of another. The tree grew weaker and suffered.

Two thousand years later, the tree became very sick. The animals it loved were disappearing rapidly; the air was always full of chemicals and pollutants. The night was never fully dark anymore as the lights from a nearby city blazed all the time. The amount of cars was a hundred times the amount it was. Once sacred rivers were filled with waste and poisonous chemicals. People made even more factories and drilled into the Earth’s surface, hungry for ancient fuel to fill their cars and other technology. And while some indulged in luxury, others starved, for drought killed all their crops. And hurricanes left some homeless. The Earth became hotter and milder every year. Rivers dried up, heat waves wiped out any person or animal that stayed out long.

The tree was weak now. Its magnificent leaves stripped off, leaving thin pathetic branches. It had little hearts and other various images carved into its surface that were generations old. It shook violently when the occasional wind blew, its bare branches sounding like bones.

Then, one day, a young girl and a young boy came up to the tree. They ran their hands over its grayish trunk, talking in whispers, their eyes bright with some fierce determination. The tree watched as they walked away, hoping that they would bring a brighter, healthier, hopeful future. Because every living thing needed it.

Two person poem entitled "Too lazy, too unwilling!"

I need a place to stay I need a place to stay
My food is gone so is my home
Should I buy one of these houses?
Why did you build your house over mine?
I need a place to call my own too.
I know you do, but so do I.
Why can't we live together in harmony?
It will get too crowded like
an ant hill with millions of
tiny ants trying to get in and out!
But I am not just an any! I am quite big!
From the smallest ant to the largest elephant
We all need saving.

But why is the environment so
important? The trees, the leaves
they don't have feelings!

Maybe not the trees or the leaves but,
they are living. The environment needs saving
and some people are too lazy to help or just
don't want to help!

Well I have no money I can do
nothing for you!

Yes you can! You could help by not driving
to your friend's house or turn off your water
while you brush your teeth or even just
recycling
It doesn't take too much time to do these simple tasks.

But I'll get tired.

But you'll be helping.
I guess it wouldn't hurt to walk to
My friend's house and ride the bus to
work

That's the spirit!

Verse from the song, "Please save the Environment"

We should throw out our garbage
And recycle bottles too
Cuz we're filling up landfills
And we won't know what to do
When they start to make

Our neighborhoods smell bad
Then we won't want to play
And we will be very sad

Excerpt from a debate

Debater 1 – African – I live in Africa and now my family is having very big problems with our food supply and being attacked. My family currently has been attacked two times, while in those times we have lost livestock that we eat to survive. My opinion is to kill the animals that harm our livestock or the result is we starve.

Debater 2 – Scientist – Hello everyone, I am a scientist and I believe we should protect these animals no matter how troubling they may be! Some are losing their habitat and we must protect them in order for them to survive.

Debater 3 – Naturalist – Good evening. I am a naturalist and I am here to discuss about the environment and this issue over the animals interacting with the humans. We have been cutting down many trees over the years for people to live and have planted few back. Now the animals are losing their homes over this and their space to live has gone down tremendously. Their only way to get food nowadays for them is the farmer's livestock. I believe it is partly our fault for letting this event come into play with our environment. How can we work together?

Play entitled *The River*

Sarah = S, Amy = A

S: Wow, what a beautiful day. Hey, Amy, want to go wade in the river?

A: Sure, sounds great.

S: This water is so nice, c'mon Amy!

A: (Wades into the river) Hey look! I think I found a salamander!

S: (Goes and looks at Amy's feet) Cool, that's a spotted salamander. It's one of North Carolina's #1 indicator species.

A: What's an indicator species?

S: It helps us know early if there is a problem with the environment. Amphibians are good for detecting water pollution because they absorb water through their skin, so they will know if the water's bad.

A: Makes sense. Aren't salamanders also endangered?

S: Yep.

A: We have to make sure they don't go completely extinct!

S: You said it!

1 year later:

S: It's such a nice day! You want to go wading in the river?

A: No, it looks all brown and murky.

S: Yeah, but it's so hot.

A: Here, drink some water from my thermos.

S: (Amy tosses thermos) Thanks! (Drinks) BHEAH! This is gross!

A: Yeah, it hasn't been too good lately. MY little brother got sick last night because he drank so much water.

S: (Walks over to the edge of the water) Hey, the salamander's gone! In fact, I only see muddy water and scummy rocks.

A: This is so gross, it makes me so sad.

S: I know, it's too bad about the salamander.

A: Yeah, too bad

S: Let's just leave.

A: Yeah, this is no fun.

Helpful Resources for Helping the Environment Helps the Human Race: Differentiated instruction across the curriculum.

<http://www.wwf.org>

<http://www.earthtrust.org>

<http://www.greenpeace.org>

<http://www.worldwildlife.org/species/humanwildlifeconflict.html>

<http://www.lionresearch.org/main.html>

<http://www.anwr.org>

<http://www.safearticrefuge.org>

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

<http://www.rain-tree.com/facts>

<http://www.globalexchangestore.org>

<http://www.ran.org>

<http://www.heifer.org>

<http://www.oxfamamerica.org>

<http://www.csdw.org>

<http://blueplanetrun.org>

<http://www.tampabaywater.org/watersupply/tbdesalprocess.aspx>

<http://www.feow.org/>

http://www.thecoca-colacompany.com/citizenship/conservation_partnership.html

<http://dsc.discovery.com/guides/planetearth/planetearth.html>

<http://www.epa.gov/bioiweb1/html/indicator.html>

http://www.ncwater.org/Education_and_Technical_Assistance/Stream_Watch/gallery.html

<http://www.biodiversityhotspots.org>

http://investigate.conservation.org/xp/IB/basics/basics_hotspots.xml

<http://www.aza.org>

<http://nationalzoo.si.edu/ConservationAndScience/SciencePlan/mission.cfm>

<http://www.lairweb.org.nz/tiger/release2.html>

<http://conservation.wdwpublishaffairs.com/>

<http://www.swbg-conservationfund.org/>

<http://www.disney.com/conservation>

