

Current Environmental Issues



Environmental issues such as global warming, water, and air pollution, are some of the most important problems of today. There are many reasons for the destruction of our environment. These issues are very complicated and require the expertise (knowledge) of scientists to be understood. Therefore, the average person understands very little about the issues of the environment.

Who Is Responsible?

Corporations (large companies) are often blamed for destroying the environment. Corporations try to compete with other companies in other nations and as a way of cutting costs, they do not clean up the pollution made in their factories. Many environmental problems are found in growing industrial countries such as China or India.

Consumers (those who buy goods) can also be blamed for environmental destruction. For example, Americans buy large automobiles (such as SUVs). These cars burn gasoline and let out destructive gases that destroy the environment. Large cars like this are worse for the environment than smaller cars. However, consumers want these cars, so companies continue to make them.

Who is responsible for these environmental issues: corporations or consumers?

WHO IS RESPONSIBLE FOR THE DESTRUCTION OF THE NATURAL ENVIRONMENT?

DIRECTIONS: You and your group members will be reading one document that explains an important problem facing our environment today. After reading the document, **each group member** will be responsible for filling out the chart below. Make sure to completely fill in all the information required – you will be presenting the information to your classmates!

You will finish the task only when you and all your group members have completed the task. Ms. I & Mr. Navarria will check to see if you have completed the task.

Our Task # is: _____

The environmental issue we read about was: _____

Explain – What is the problem?

What is the cause of the problem?

If the problem is not fixed or corrected, what are the possible consequences?

AFTER THE ACTIVITY:

You will be presenting your issue in front of the class and listening to other groups' presentations. As you listen, fill in the chart on the next page. ⇨

<i>Issue</i>	<i>What is the problem?</i>	<i>What is the cause of the problem?</i>	<i>What will happen if the problem is not fixed?</i>
#1 - Acid Rain			
#2 - Fukushima Nuclear Crisis			
#3 - Deforestation			
#4 - Food Crises			
#5 - Air Pollution			
#6 - Oil Spill			

#1 - Acid Rain- Is Acid Rain Killing Off Wood Thrushes?

Robert Winkler
for National Geographic News
August 13, 2002

(A wood thrush is a North American bird)

Researchers at Cornell University have found that acid rain is responsible for the decline [fall] of the wood thrush, a forest bird known for its beautiful song.



Like many birds who South during winter, its population has been falling fast—nearly 2 percent a year.

Using data, the Cornell Laboratory found that increased amounts of acid rain make wood thrushes less likely to breed (reproduce).

What is Acid Rain?

Acid rain is a term that became popular in the 1980s. At this time, acid rain was having destructive effects on trees and lakes. Acid rain results when harmful chemicals like nitrogen and sulfur go up into the atmosphere, combine with water and come down on the ground in the form of rain. Most of the chemicals in acid rain come from factories.

The Clean Air Act (a law passed in 1990) tried to lessen the harmful effects of acid rain, but it still continues to affect humans and wildlife as industry continues to pump out destructive chemicals into our air and water supply.

#2 - Fukushima Nuclear Disaster- Breaking News

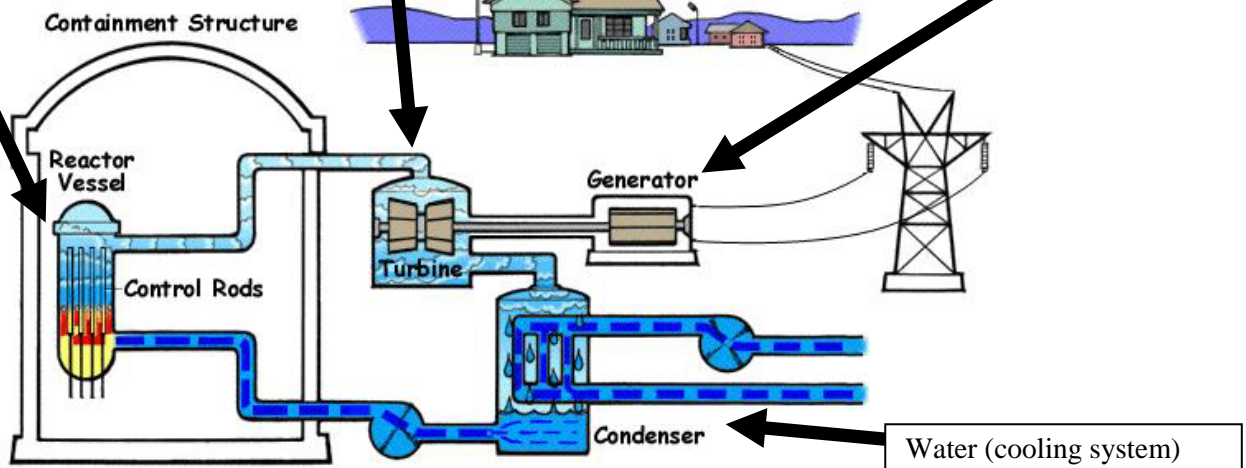
First understand how nuclear reactors work by reading the graph below:

How nuclear reactors work

Inside a nuclear reactor is a reactor vessel where the process of nuclear fission occurs (splitting of uranium atoms). The reactor must be kept in water to avoid overheating.

The reactor generates heat which turns a turbine

The turbine spins a generator which generates electricity to be used in people's homes. About 20% of electricity comes from nuclear power plants today.



The New York Times

Updated April 25th, 2011

In March of this year, an earthquake caused a huge tsunami. These events caused one of the worst nuclear disasters in history. The accident happened at Fukushima power plant. The nuclear reactors there suffered partial meltdowns (which happens when fuel inside the reactor overheats).

The reactor released radioactive material directly into the atmosphere and into the ocean. Now, the sea water is highly dangerous and toxic.



Radiation was found in Tokyo's drinking water. Fruits, vegetables, meat, and milk near the reactor have also been identified as radioactive and cannot be eaten. Many people were forced to leave their homes and are living in shelters. The radiation is still too high for workers to go in and fix the reactor. The reactor is still releasing toxic materials into the atmosphere and water. No solution for the problem has yet been found.

#3 - Deforestation

Loss of Amazon Rain Forest May Come Sooner Than Expected

National Geographic News

June 26, 2001

Scotland – While many environmental issues divide people around the world, most scientists agree on this one – the world’s rainforests are rapidly disappearing. And they suggest that we are not acting fast enough to save them.

According to projections by a Penn State professor, rainforests would reach a “point of no return” in as little as 10 to 15 years from now. The rain forest in Brazil could be wiped out as soon as 40 to 50 years.

The results of scientific studies showed that, with no action to stop the losses, rain forests could become unsustainable. This means that the rainforest will be unable to grow back fast enough to keep alive its wildlife.

No Easy Solutions

Millions of people living in and near the rainforests use the rainforest to cut and sell rainforest wood to make money. “It is hard to say leave the forests alone when people live in poverty and use it to feed their families,” a scientist stated.

Why Save Rainforests?

In the Amazon rainforest, there are millions of species of animals and plants that will disappear if the rainforest dies out. These include many plants that are used for medicinal purposes and animals that are not found anywhere else in the world.



#4 – Food Crises

Food Crisis In Niger Will Strike Again, Experts Say

Stefan Lovgren
for National Geographic News
September 12, 2005

(subsistence farmers- farmers who grow only enough food for their family)



Widespread hunger first struck the West African country of Niger earlier this year. It was blamed on drought (lack of rain) at first. However, if we look at the environmental reasons for this, we will see that the issue is not as simple as it seems.

Niger has desert areas but most of its people live in a fertile region that produces a lot of grain. Here, droughts happen often, about once or twice every five years. Droughts are common in this poor nation and the one that happened in 2004 was not particularly bad, and did not affect the capital city of Niger very much.

However, the people in the countryside are starving because they are subsistence farmers. This means that they only grow enough food to feed themselves and their families. To do this, they need to be able to afford to buy water, but cannot because they are mostly poor. They have almost no money to buy grain when their own crops fail and prices rise.

So while the shelves of the supermarkets in the capital city remain stocked with food, poor Nigerian farmers are starving in the countryside.

#5 – Air Pollution- Joshua Tree, Threatened by Pollution and Growth, Hosts Rally

Stefan Lovgren
for National Geographic News
September 16, 2005

The Joshua Tree National Park was opened in 1936. It is the home of two deserts and a variety of wildlife, including bighorn sheep and endangered turtles, and more than 700 types of plants.



According to one proposal, an area around the park could be turned into the largest landfill in the United States. It could receive up to 20,000 tons of garbage daily. Scientists warn that it could disturb the wildlife in the park.

Nitrogen Pollution

Air pollution is already a major problem in that area. Pollution coming from nearby Los Angeles, with its millions of cars, has caused the highest levels of air pollution of any US national park. Visitors complain that their views of mountains are ruined by smog (smoke and fog).

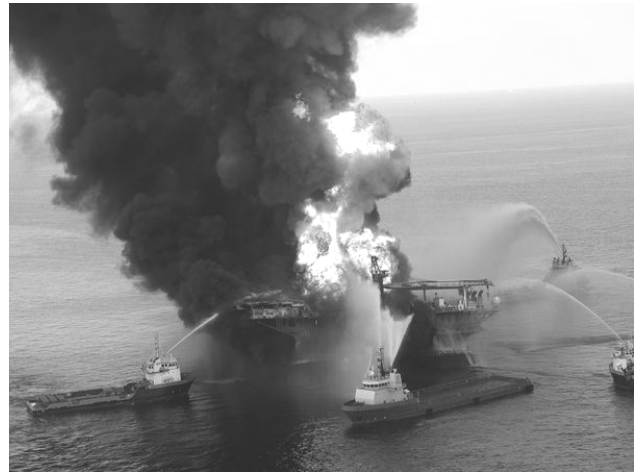
Nitrogen, a chemical contained in car exhaust, has contributed to the destruction of Joshua trees and other plants that live in the park. Nearly a fifth of the park's Joshua trees have been lost. The trees can live for hundreds of years, and it takes a century to replace just one.

#6 - Gulf Oil Spill

Gulf Oil Spill Could Reach East Coast Beaches

Loop current could carry oil around Florida's tip, experts say.

Christine Dell'Amore in Metairie, Louisiana
[National Geographic News](#)
Published May 4, 2010



(On Tuesday April 20, 2010, an off-shore oil rig that drills oil deep on the ocean floor, exploded 45 miles off the coast of Louisiana).

The oil spill caused by the explosion continues to pump thousands of barrels of oil every day into the Gulf of Mexico. Winds and the ocean current could push the oil even farther than it has already traveled.

If oil is swept into the powerful Loop Current, which moves at about 3-5 feet per second, there could be no way to stop it. The oil, will then go to the Southern and Eastern coasts of the United States.

"It's so much better to stop this oil in the ocean before it hits the beaches," an expert said, "because cleaning it up would be impossible."

Oil Spill Would Endanger Wildlife, Fishing Industry

The floating oil could get pulled into land along the Florida peninsula, where it would settle into mangrove forests. These forests contain many species of sea life. The oil spill would also kill off fish eggs that are born on the seafloor and then later, ride currents such as the Loop current. The oil spill will also affect the fishing industry, wildlife reserves and endanger the jobs of thousands.



