



The Environment in the News



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Grade Level: Middle School

Subject Correlation: Social Studies, Language Arts, Science

Objectives: Students will be able to:

1. Relate how the environment influences their daily lives.
2. Practice creative writing and interpretation exercises.

Length: One class period

Teacher Preparation: Teachers may choose to 1) bring to class articles in the newspaper that are related to environmental or sustainability issues, 2) bring in several newspapers and allow students to search for appropriate articles related to environmental or sustainability issues, or 3) assign students as homework the task of bringing in an article from the newspaper that is related to the environment or sustainability issues.

Outline (with times)

20 minutes

Introduction: Headlines

The following list of headlines comes from real news sources around the world. Give students 10 minutes to write a short article describing what they think the news article may be about. Encourage students to use their creativity. After students have had some fun with this creative exercise, the teacher should distribute summaries of the actual story. Allow students to compare their news stories with the actual stories. Some students may want to read their creative stories to the class and then compare to the actual story.

20 minutes

Environmental Issues in Current Events

Depending on which choice the teacher makes under “Teacher Preparation,” the teacher will either distribute current events stories related to environmental and sustainability issues, allow students to search through newspapers for appropriate articles, or have students bring in their own current events articles. Students may need to work in small groups if not enough articles are available for each student.

After using their imagination to write their own creative stories based on the given headlines, students will read the factual summary of the actual story. Students will summarize the actual environmental stories by answering the following questions:

1. Write a one-paragraph summary of the news story. Be sure to include important facts, such as the location, people involved, background information, and outcome.
2. What is interesting or newsworthy about your story?
3. Does the news in your story have a positive or negative effect on the environment? Why?
4. Does the news in your story have a positive or negative effect on you? Why?
5. How could this story influence your community/the United States?

Headlines from Real News Stories

These are headlines taken from articles appearing in newspapers around the world. Cut them into individual headlines and distribute to students. Students will use their imagination to write their own news story based on the headline.

Turning Genetically Engineered Trees into Toxic Avengers

Microbiologist Sees Earth Benefits in Mars Soil

Environmentally Savvy Drivers Cook up a New Fuel

Wind Farm Blows New Life into Spanish Village

Briton Says Launches World's Smallest Folding Bike

New York "Mongo" Hunters Find Treasure in Trash

Sewage is Turning British Fish Female, Says Report

Brazilian Army to Join Fight Against Deforestation

Nations Collaborate to Take Planet's 'Pulse'

California Dairies Are Turning Manure into Money



Summaries of Real News Stories

The following are summaries of the actual news stories. Distribute to your students so that they may compare their story to the actual news article.

Turning Genetically Engineered Trees into Toxic Avengers

New York Times, 8/3/04

Last summer, 160 Eastern cottonwood trees were planted in Danbury, Connecticut with the intention of reducing the mercury levels in the soil. The trees, genetically engineered by Dr. Richard Meagher, a genetics professor at the University of Georgia, were designed to remove the mercury from the soil, convert it to a less toxic form of the element and release it into the air. The mercury then floats into the atmosphere where it is diluted and then returns to ground level.

Experts are ambivalent about the potential consequences of the process. Environmentalists and some genetics professors have argued that introducing the new genetically altered species of tree could harm the surrounding natural flora and fauna. They argue that because pollen from trees can travel long distances, it can affect a large surrounding area, and can even potentially take over that area, killing the natural species as a result. Experts also argue that taking mercury out of the soil and putting it into the air merely transports the toxin and does not remove it.

Dr. Meagher admits that the trees would not be a cure-all. However, he and others argue that the transfer of toxins is not without benefit since it is released in a diluted form into the air rather than as the concentrated form found in the soil, which can seep into drinking water. Either way, though, it is still too early to tell whether the trees will have the desired effect, as Dr. Meagher will only begin to assess the results this fall.

Microbiologist Sees Earth Benefits in Mars Soil

Houston Chronicle, 5/19/04

As the US rover, Opportunity, scours Mars for signs of water, microbiologists on Earth, including Raul Cuero of Prairie View A&M University, are examining ways in which the Martian soil might remove toxins from our planet. Using an artificial soil modeled on that found on Mars, Cuero has created an organic solution which helps prevent mold and bacteria from growing on vegetables. Additionally, he has also discovered a way to remove toxins from metals without using synthetic chemicals. The process is 100% natural. Questions still remain, however. The most pressing, of course, is whether soil on Mars is truly comparable to the artificial soil developed by Cuero in regard to removing toxins and preventing bacteria, but many in the scientific community are excited about the prospects.

Environmentally Savvy Drivers Cook up a New Fuel

Associated Press, 6/4/04

Diesel car owners now have an alternative fuel on hand. For \$800, drivers can have a fuel conversion kit installed in their cars which burns vegetable oil instead of gasoline. The kit may sound expensive, but considering the rising cost of fuel and the fact that many veggie drivers get all the fuel they need from restaurants for free, it often pays for itself within a year. Most drivers simply call an obliging restaurant before they need to refuel and then pick up a few gallons of used vegetable oil. The restaurant saves the money it would have spent to have it carted away, and the driver is rewarded with free fuel. The best part: it is environmentally friendly. The car still starts on diesel fuel, but once it is running, the vegetable oil kicks in and performance isn't compromised. The only difference is instead of the sooty, odorous emissions of diesel fuel, vegetable oil is clean and emits the pleasant aroma of French fries.



Wind Farm Blows New Life into Spanish Village

Environmental News Network, 7/8/04

One shudders to think what would have befallen Don Quixote if he took on the 244 180-foot modern turbines that make up Europe's largest wind farm. Located in the village of Higuera, in the fictional knight's home region of Castille-La Mancha in Spain, the windmills supply energy to 640,000 people. But that's only half the story. They are also proving an economic boon to the village. Two new schools have been built in Higuera, and residents rejoice at the new jobs the wind farm has created and the revenue it has supplied. Of course, not everyone is happy at the prospect of the government installing large turbines on a hill above their village. Some see them as an eyesore, and others are worried that they would be installed in the flight path of birds, but each potential wind farm undergoes a scrutinizing environmental impact assessment before being installed, and the majority of Higuera residents see a positive impact.

Briton Says Launches World's Smallest Folding Bike

Environmental News Network, 7/9/04

Set to go on the market in 2005, Sir Clive Sinclair's "A-Bike" is officially the world's smallest folding bicycle. Weighing in at 12 pounds, the bike, when zipped into its bag, is just over one cubic foot in size and looks like a large umbrella. The "A-Bike" is also very dynamic, adjusting to height and accommodating anyone as heavy as 247 pounds. It can travel up to a speed of 15 mph, and is suppose to give a very stable ride. Sinclair hopes the bike will change the way people get around in the city by making the bicycle more portable. It is, after all, more convenient to carry your bike into the office or classroom instead of having to find a place to lock it up.

New York "Mongo" Hunters Find Treasure in Trash

Environmental News Network, 7/14/04

Recycling, as it turns out, is not always a conscious habit. In a new book by South African writer, Ted Botha, *Mongo: Adventures in Trash*, the author chronicles his adventures around New York City collecting the unwanted items of the city's residents, items he says are nicknamed "Mongo" by the others who follow this habit as well. His accounts of what people have found are sometimes astonishing. One woman found a Civil War-era baby crib, while her husband found enough building materials to construct an entire house. Other findings have included first editions by James Joyce and Thomas Wolfe, while can and bottle collectors in Central Park say they can make \$10,000 in a summer by turning them in to recycling centers.

Sewage is Turning British Fish Female, Says Report

Reuters, 7/13/04

Sewage flowing into Britain's waterways and containing female hormones is having harmful effects on the country's fish. In a study of 1500 fish in 50 different locations, one third of males showed some female characteristics. The full consequences are not known yet, but preliminary indications point to a reduced ability to mate. The female hormones found in the water seem to come mainly from hormones produced naturally by women or as a result of them taking a contraceptive pill. Immediate action has been suggested by Britain's environmental agency, especially considering the fact that these statistics are not endemic to the UK, although it has the most comprehensive data on the phenomenon.



Brazilian Army to Join Fight Against Deforestation

Associated Press, 7/14/04

Cooperation between government ministries is not impossible, it seems. Brazil's environment ministry has teamed up with the army to fight against illegal deforestation in the Amazon Rainforest. The deal requires the environment ministry to pay the army 10 million reais (\$3 million) in exchange for 100 soldiers, 18 helicopters, and access to military bases. The soldiers and helicopters will primarily be used to transport environmental protection agents throughout the rainforest. It is hoped that this deal will help the environment ministry enforce a law requiring landowners in the rainforest to keep 80% of the land intact. The law is often disregarded because of lack of enforcement.

Nations Collaborate to Take Planet's 'Pulse'

Washington Post, 7/26/04

In an ambitious effort to increase our ability to predict environmental changes, 50 countries have teamed up to create the Global Earth Observation System of Systems. The network will utilize already existing instruments to monitor the land, sea, and air. These instruments include weather stations, buoys, ships, and aircraft. The undertaking is expected to dramatically increase our ability to more accurately predict occurrences as mundane as daily weather patterns, to natural disasters like earthquakes and hurricanes.

In addition to saving lives and reducing damage caused by these disasters, it is also hoped that the network will have a positive economic effect. Better drought prediction may save American farmers up to \$8 billion a year, and more accurate and up to date weather predictions over oceans can decrease the amount of time tankers spend in port – increasing efficiency while diminishing cost.

Finally, scientists hope the new technology will help stem diseases such as malaria, which have been tied to weather patterns.

California Dairies Are Turning Manure into Money

Associated Press, 7/21/04

Along with milk and beef, cows in California are now producing something else in high demand: energy. Thanks to new incentives by the state government, cattle farmers are using their cows' manure to drive down their bills. The benefits are twofold. Manure from cattle adds methane to the atmosphere, a particularly dangerous greenhouse gas. However, with the new method, that methane is burned to create energy. The process is simple. Add water to the manure, cover it with plastic, heat it up, and filter the resulting gas into a generator. As a result, the farmer's energy bills are drastically reduced. A farm with 1200 dairy cows can save \$30,000, and if the generator is plugged into the local power company the farmer can even gain credit with any extra energy his manure creates. The results seem good across the board: environmentally friendly practices, easy disposal of the manure, and financial rewards.

