

“Dark Waters Ahead” a Georgia Outdoors Production Teacher Guide

Synopsis

The *Deepwater Horizon* oil spill disaster of 2010 is one of the worst oil spills in history. It ravaged the economy and the wildlife of not only the Gulf Coast states, but also that of the entire country. It is important to learn from the mistakes of the oil spill to prevent similar disasters in the future.

“Dark Waters Ahead” a Georgia Outdoors Production, explores the *Deepwater Horizon* oil spill disaster from the shores of Alabama. Host Sharon Collins takes the viewer on a first-hand look at what the disaster means for the people who live and work in the Gulf as well as the wildlife it destroyed. “Dark Waters Ahead” proves that all things in nature are truly connected, from the hermit crabs on the beach of Alabama to the fisherman on the Georgian coastline.

Pre-viewing Questions

1. What do you know about the *Deepwater Horizon* oil spill disaster?
2. Was anyone affected by the oil spill?
3. What were the economic consequences of the oil spill?
4. What were the environmental consequences of the oil spill?

Post-viewing Questions

Part 1

If fish habitats in the Gulf of Mexico were destroyed, what would that do for ecosystem? What would that do for the fishing industry and for Americans all across the country?

Part 2

How can you connect birds that live in Canada and New York to the oil spill disaster in the Gulf of Mexico? Is this a problem just for the gulf states to manage or should people in other states, particularly the north, aid in the clean up effort as well?

Part 3

Fishermen who were out of work because of the oil spill lined up in hopes of receiving jobs in the cleanup effort. However, they fear that even when all the oil is cleaned up the ecosystem will take decades to fully recover. Do you think the federal government should play a role in providing ongoing aid to families and communities that depended on the fishing industry? What do you think the role (if any) of BP (British Petroleum) should be?

Part 4

In a desperate attempt to break up the oil, the federal government dumped chemical dispersant in the Gulf of Mexico. However, it is known that these chemicals are toxic to living creatures. Was this a good idea? Do the gains of breaking up the oil outweigh the potential destruction that the chemicals have on living organisms?

Part 5

The Deepwater Horizon oil spill disaster of 2010 is one of the worst in history. Do you think that offshore drilling is worth the risk of a catastrophic oil spill in the Gulf of Mexico? Why or why not?

Quiz Questions

Part 1

1. Where do the majority of the fish and shrimp harvested by the United States come from?
(The Gulf Coast)
2. What happened on April 20th, 2010?
(An oilrig exploded in the Gulf of Mexico, causing a massive oil spill.)
3. What function do oysters have in the ecosystem of the Gulf of Mexico?
(They provide crucial habitat for many types of massively caught fish.)

Part 2

1. What tiny organisms have the ability to break down petroleum and other forms of oil?
(Microbes)
2. If oil were to enter a marsh, what is one proposed suggestion that may allow the overall marsh to be saved from destruction?
(Burning the area contaminated by petroleum)
3. Birds those are native to northern states like New York and Massachusetts often fly south for the winter. Where do they generally fly to and feed during the winter months?
(The Gulf of Mexico)

Part 3

1. What are people doing to clean up the oil once it washes upon the shore?
(They rake it up and put it in plastic bags.)
2. What happens to the oil if it is not immediately cleaned off the beach?
(It sinks into the sand and is trapped there.)
3. What happens to small animals that are trapped in the oil and cannot escape?
(They die.)
4. What do people who live in fishing communities believe will happen if the oil washes up on their shores?
(Their entire community will be destroyed.)

Part 4

1. The government set up hundreds of miles of oil boom to prevent the oil from traveling across the surface onto the beaches. However, the majority of the oil from the oil spill was below the surface. What organism suffered because the oil boom did not prevent the movement of oil beneath the surface?

(Fish and other sea life.)

2. Many industries moved from New Orleans to Alabama due to this natural disaster that occurred in 2005.

(Hurricane Katrina)

3. What are researchers afraid will replace oxygen in contaminated water and create dead-zones across the region for organisms that need oxygen to survive?

(Sub-terrain gasses)

Part 5

1. This is one of the most powerful currents in the world, traveling through the Gulf of Mexico and into the Atlantic Ocean all the way to Europe.

(The Gulf Stream)

2. What are scientists afraid will happen if the Gulf Stream is contaminated by the oil spill?

(The oil will travel through the Gulf Stream and contaminate the eastern seaboard/crucial fish like tuna that lay eggs in the Gulf Stream will die/other sea life will die)

Geography Activities

Locate on a map:

Georgia Coast

Gulf Coast

Gulf of Mexico