



10 Minutes for the Planet

Oil spills: black gold polluting the oceans ©

by Sarah Heath

Hello! I'm Sarah Heath and you're listening to 10 Minutes for the Planet on English Waves.

A ship which recently ran aground in turbulent weather just off the Solomon Islands has meant that environmentalists and local politicians are facing a grave, potentially catastrophic, situation. The archipelago is made up of six main islands and over 900 smaller ones found in this part of Oceania which lies east of Papua New Guinea. Parts of these islands, which are being affected by the spill were listed as a UNESCO World Heritage Site in 1998. The southern part of Rennell Island is the home of the world's largest coral atoll and the surrounding area has many endemic species.

The vessel was chartered by an Indonesian mining company and was laden with bauxite when it accidentally hit the rocks just off Rennell Island. This has resulted in an oil spill which is threatening to devastate the area.

To date, around 80 tons of oil have leaked out of the ship and into the sea and while salvage operations have started, there is major concern over the remaining 600 tons on board. The ship's owner has thus far failed to act which has led to the local government appealing for help from neighbouring countries such as Australia.

The Australian High Commissioner has said that "this oil spill will have a devastating effect on the surrounding environment, including potentially on a protected UNESCO World Heritage Site, as well as the livelihood of the people of Rennell". Known as a "true natural laboratory", the seas around the Solomons are home to a delicate ecosystem of which the coral makes up a part.

Oil spills over the past 40 years have resulted in hundreds of millions of gallons of oil being released into the sea causing untold damage to the marine environment. The full name for the oil in such a case is liquid petroleum hydrocarbon and it is a major pollutant. Once spilled into the ocean, it is a vast, if not impossible, effort to entirely eradicate the oil from the water as currents spread it for hundreds of nautical miles. An example is the oil production platform in the Gulf of Mexico which was destroyed in 2004 by Hurricane Ivan, which still releases 300-700 barrels of oil per day into the sea and, according to experts, will continue doing so until well into the 21st century.

The National Oceanic and Atmospheric Administration in the United States has reported that there are still around 25,000 gallons of oil buried along the Alaskan coastline – oil originating from the Exxon Valdez spill way back in 1989.

Oil generally floats on the surface of the water which means that animals such as birds and seals are often affected more than other species. It also depends on the kind of oil which has leaked into the water: lighter oils are slightly less harmful in that they disperse more easily through evaporation. They are however, still poisonous so still very much have a detrimental effect on marine wildlife, including plants. Heavier oils are far more difficult to deal with and will remain in the water for years if not cleaned out. These oils have a devastating effect, particularly on birds who become covered in the oil which prevents them from flying. The oil also destroys the birds' natural water-proofing which can then lead to death through hypothermia. When the birds try to clean themselves, they usually ingest some particles of oil which then poisons them. It is estimated that the Exxon Valdez oil spill caused the deaths of up to 500,000 seabirds.

Fish are also major casualties when oil is leaked into their habitat. Species themselves are wiped out in certain areas but so are their eggs, also destroying the next generation. The BP Deepwater Horizon spill in 2010 is considered to be the largest spill in history and totally wiped out prawn and oyster stocks along the Louisiana coastline – completely eradicating the fishing industry in the area. It also means that the marine food chain is interrupted for mammals who depend on fish for their survival. Otters, seals and dolphins, if they manage to avoid the effects of first-hand contact with the oil, can find themselves without food when the spill ravages the fish populations.

When the oil washes ashore, the breeding and nesting grounds for animals such as sea turtles also falls victim to the oil. Beaches are also home to numerous animals such as insects, worms and snails. They too become victims.

The final toll in the Solomon Islands remains to be seen but if reports by the environment agency, Greenpeace are anything to go by, very little effort is being made to prevent more oil from the stricken ship leaking into the surrounding sea. What does the future hold for these beautiful but threatened islands?

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