

Devastating Hurricanes - The other side of the story

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We recently faced two disastrous hurricanes that destroyed thousands of homes, public property, and left millions stranded without power. Hurricane Irma was the strongest Atlantic hurricane with winds over 185 mph.

Storms have a profound effect on nature. Strong hurricanes and storms can destroy forest canopies, estuary and coastal habitats. Severe tropical storms may increase soil erosion and destruction of infrastructure, crops, livestock, natural ecosystem and animal habitat. In the past, floods have increased because of deforestation and loss of topsoil that absorbs water.

It is believed that human beings have altered the climate in ways that make these storms more severe. There is a common consensus among experts that future hurricanes may be stronger, if sea surface temperature continues to increase with its current warming trend. Environmental effects of Irma will be determined once the widespread devastation it caused has been dealt with.

Here is a thumbnail view of the effects of hurricanes on our environment and animals

Effect on Animals

Storms of high magnitude strip trees, the main source of food for animals, and storm surges dislocate turtles and kill fish. Animals and birds may be directly or indirectly affected by hurricanes in terms of loss or change in habitat and lack of food. In the past, some endangered

species have been reported to be wiped off because of hurricanes. Huge movements of water caused by storms force displacement of animals. The owner of an alligator farm in Florida warned that hundreds of the reptiles would have been set free if the flood water rose by just another foot during Irma. Other studies have found that decrease in phytoplankton growth (the algal basis of the ocean food chain) affected fish population for a short duration following a storm.

For instance, hurricane Irene's surges brought water levels above normal high tide that created an imbalance in freshwater and brackish wetland areas. Species living in ecological niches in the sandy areas of coastal barrier islands are affected by wave actions and strong winds.

Hurricane Katrina killed many animals of the Aquarium of the Americas in New Orleans. This Aquarium had over 530 species of fish, turtles, alligators and other animals. Most of the creatures died because of the power failure.

Other effects

Storms leave a lot behind including contaminated water, gasoline, rubbish, debris, broken road signs and sewage. Stagnant water may become a breeding ground for mosquitoes, which may lead to diseases. Authorities have been urging people to get their tetanus vaccinations updated before cleaning up in their homes, because of an increased risk of stepping on something sharp. After hurricane Sandy, cities in

New York and New Jersey released untreated sewage into local waterways causing an immediate public and environmental health threat through water contamination.

There is something even more unfortunate here - release of harmful chemicals in air, water and underground systems. After Harvey about 13 refineries had to shut down operations around Houston and they may potentially release thousands of pounds of pollutants into the air. This pollution from petrochemical plants may cause headaches, sore and itchy throat and eyes. More effects of Harvey unfolded when the skies cleared and the water dipped. Two explosions were heard at the Arkema chemical plant in Crosby, Texas. This chemical plant was inundated with six feet of floodwater that led to power failure. The backup generators went out soon and eventually all refrigeration units were knocked out. This chemical plant stores highly combustible organic peroxides that needed to be kept chilled. With power failures, chemicals caught fire releasing smoke, which is claimed not to be toxic but noxious. Residents within several miles were recommended to stay indoors.

Similarly, when floodwater gets in contact with potentially harmful chemicals, such as lead and benzene from a chemical unit or contaminated sites, it may be deposited in and around residential properties, parks, playgrounds.

What needs to be done?

Wildlife rescue - After a storm, bird watchers and wildlife enthusiasts may help by notifying wildlife agencies for unusual or rare species that turn up in their area. Residents should also contact Wildlife rescue organizations to report any creature that was injured in a storm and try not to handle an injured animal.

Debunking the Myths - People are living with a myth 'it (climate change) does not matter to me' and "what can I do' attitude. This attitude needs to change because each individual leaves his/her carbon footprint.



Restore Coastal Buffers - Human beings have reshaped most of the landscape which has brought a lot worse than it was capable of. Industrial misuse has destroyed natural coastal barriers which need to be rebuilt and restored.

Rebuild for safe, secure and sustainable future - We should thrive to design and build homes and other building structures that are weather resistant, sustainable and energy efficient.

Improve environmental Safeguards - There is a strong need to improve environmental safeguards, laws and regulations.

