

ENVIRONMENT

Even a river needs a day

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IN A time of global crisis where the biodiversity of almost all ecosystems are being threatened, those that hail from freshwater ecosystems like rivers, lakes and wetlands, may be the most endangered. Currently river ecosystems are experiencing much biodiversity and habitat loss compared to terrestrial and oceanic ecosystems. In September the world will celebrate World Rivers Day. This celebration started in 2005 and has been celebrated on the last Sunday of September annually since then, in 2009 it will be celebrated on September 27th. It was



established to raise awareness of the value of rivers and is currently celebrated by millions in approximately 30 countries. To fully understand the significance of this day, we need to go back in time and look into a brief history on how this day of celebration began, and some of the threats our world's rivers face and what we can do as a population and as an individual to help protect this ecosystem.

World Rivers Day came about due to the success of the annual BC Rivers Day in British Columbia in Canada, which started in 1980. This event was founded by river conservationist, Mark Angelo. This event attracted large crowds of participants, 100,000 persons across the country. This eventually led to the creation of Canadian Rivers Day. The United Nations launched the Water for Life

Decade in 2005. Angelo believed that an international event commemorating the health of the world's rivers would complement it. After communicating with environmental NGOs and various UN agencies, World Rivers Day was launched that same year. Some of the events of World River Day around the globe include riverside clean ups, nature walks, paddle trips, art displays, music festivals, school projects and parades.

Freshwater ecosystems occupy only 0.8% of the Earth's surface, but they are currently home to approximately 44,000 discovered species from freshwater animals, which is estimated as approximately 2.4% of all animals and plants on the planet, some of which use these ecosystems as breeding and feeding grounds. Rivers also play a vital role in the lives of humans, as a source of food and water for drinking, for irrigation of crops as well as a means of recreation and employment. However, there are threats these freshwater ecosystems face from over-fishing, pollution, and physical alterations from dams and canals, introduction of non-native species and channelising the river bed. Global warming is also raising the temperature of rivers to levels intolerable to some species.

If you live along the course of a river just keep in mind that you are downstream and will feel the effects of flooding if something were to happen upstream. You are also upstream of the river outlet, so that what you do or dump in the river will affect persons lower down or yourself at a later time. For instance in Trinidad and Tobago we love a good "river lime" for visitors to our shores, this is where friends and family gather on the river bank to cook, eat and generally "chill out" and often leave our garbage behind. Rivers used to irrigate crops on farms along the river, release fertilizer and pesticides through run-off into the river and can make it unsafe to swim in and fish in. Also dumping garbage by residents or river limers can cause flooding in the flat lands or lower down the valley. Rivers also play significant roles in religious ceremonies, for instance with East Indian culture the Ganges River in India is used as a site for many significant religious ceremonies, the same goes for rivers in Trinidad and Tobago.

The creation of dams may sound unrelated to this topic but you have to keep in mind that rivers are blocked to create dams. However, when these dams are built they

release very little water, too little to support plants and animals located downstream.

Natural river systems provide such services as aquifer replenishment and water quality improvement in polluted sites; additionally they also provide transport of materials and organisms, such as sediments, dissolved minerals, seeds of plants, nutrient rich detritus of plants and animals both alive and dead. Due to the heavy role rivers play with regards to plants, animals and humans it should come as no surprise that they would contain fossils of the plants and animals that lived there and the humans that depended on it for food. Trinidad knows all too well the disastrous effects of tampering with the natural courses of rivers, as the cutting of our hillsides for houses has resulted in widespread flooding in the lowland areas, and in turn a loss of crops and higher food prices, damage to vehicles and properties and deaths. This unfortunate state of affairs is also happening in Tobago.

After all these threats, what comes to mind is, how can we help protect rivers? On an individual scale we can help protect the health of our rivers by not using them as garbage dumps and throwing everything from old newspapers to old refrigerators in them. Personally change to a vegetarian diet, this takes less water to produce. Governments can improve stricter laws and penalties on persons found polluting the rivers, diverting it for irrigation as well as damaging the wildlife contained, for example using blast fishing methods. We can also prevent river mining for sand and gravel—a serious and destructive problem in Tobago. It is also suggested that the fishing periods from these areas be shorter and less intense. There is also a call for slowing down the rate of population growth and so that the demands on this ecosystem do not exceed the capability to supply.

I think Sandra Postel and Brian Richter summarise it best in their book "Rivers for Life: Managing Water for People and Nature" when they say, "Most rivers are no longer controlled by nature, but by us." We have to keep in mind that humans affect nature and we should be stewards of nature and do all in our power to preserve these fascinating and life-giving ecosystems for generations to come.