

TROPIC NEWS

DEPARTMENT OF PLANNING AND NATURAL
RESOURCES

DIVISION OF FISH AND WILDLIFE

August/September 1996

Volume 8 Number 11/12

Something to think about: TSUNAMI

"Next Caribbean what?" you may ask? Tsunami, the seismic sea wave created when an earthquake occurs, a volcano erupts, or there's a submarine landslide, is an all too common worldwide event. "Tsunami" is a Japanese word that is loosely translated "harbor wave or seiche" based on the oriental experience from such devastating rushes of sea water. While most tsunamis which occur are observed in the Pacific and Indian Oceans, the Atlantic has its share. These destructive ocean surface waves are known to run upland in excess of 100 meters (300 feet), and to cause thousands of deaths. Sometimes tsunamis are called "tidal waves", but that is a misnomer; they are not associated with the regular ebb and flow of daily tides, but are caused by unpredictable, instantaneous phenomena as mentioned above.

Now, is it really a "Wider Caribbean Region" threat? Well, yes! Very destructive tsunamis occurred in the Virgin Islands in 1692, 1755, 1761, 1842, 1867, 1918, and 1946; scores of smaller ones are in the record too. Wave surges associated with our tsunamis are not as great as the Pacific and Indian Ocean events, but some typical numbers are 4-7 meters (13-23 feet) in several fully documented cases. This is larger than the largest recorded hurricane-generated storm surge.

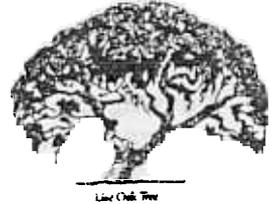
What makes it worse is to couple the tsunamis threat with our population growth. Since 1867, the year of the great Virgin Island tsunami, the population of the Caribbean area has increased from about 3 million to about 30 million persons, most of whom have chosen to live near the coast. Imagine the 1867 tsunami's 5 meter (17 foot) high wave crashing into Charlotte Amalie harbor today, *without warning*, with a 10-fold plus higher population density, while three cruise ships and several fuel barges are in harbor, and two tourist-laden jets are waiting for takeoff at the St. Thomas airport! It's all too real.

What should you do? The main characteristic of an impending Tsunami would be the rapid receding of the water at the coastline. The correct action to take would be to immediately move away from the coast; travel inland as far as possible. Oldtimers who experienced the Tsunami of 1867 said, people lost their lives trying to gather the fish at the shoreline when the sea receded. Being knowledgeable about this rare occurrence can avoid loss of lives if this simple procedure is followed.

Taken from: George A. Maul "IOCARIBE TSUNAMI WORKSHOP", Florida Institute of Technology.

The Value of a Tree

The determination of value in our society is truly arbitrary. Sometimes it follows the rule of demand and supply; sometimes the decision is made on the basis of cost-benefit ratio; but in many cases no standard rules exist. Sometimes we remain totally blind, particularly with regard to the value of natural resources - the value of a tree is one of them.



When we estimate the value of a tree, we only count the total weight and the quality of timber or fruit or biomass that can be sold in the market. But all of these together really reflect only about 0.3% of the real value of a tree. Other commodities that are produced by the tree, or other benefits that are being derived from the tree by our society, are totally overlooked. If we count these items at current market prices, the value of a tree will increase more than 300 times.



A few of a tree's overlooked values include:

- Production of oxygen
- Beautification of landscapes, homes and businesses
- Natural air conditioning in the form of shade
- Controlling of soil erosion and maintaining of soil fertility
- Recycling of water and controlling humidity
- Sheltering and feeding of birds and other animals and
- Controlling of air pollution

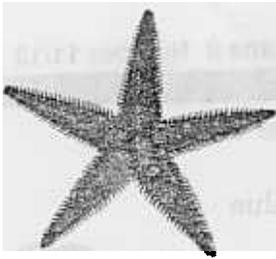
So, the real value of a 50 ton medium tree, by calculating the items it produces and benefit it renders during 50 year lifetime, will come to over half a million dollars!

"Were we to search for a single mechanism to preserve soil fertility; percolate water evenly through the seasons, and so prevent floods, erosion, and drought; release atmospheric water; store atmospheric carbon; cleanse the air; moderate global temperature and climatic balance; beautify the terrain, and support a varied fauna and flora - none could be found to serve better than a tree."

(Tropical Rainforest)

It Makes A Difference

The Starfish Parable



A mid-westerner was vacationing on the New England coast. One morning, very early, she was walking along the beach--the sun was still below the horizon, the rain had ended, the sea was calm, and a rainbow bridged the

blue Atlantic with the green shoreline. While enjoying the beauty about her, she glanced down the beach and saw the lone figure of a man silhouetted against the sea. He skipped and frolicked as if performing a ritual dance to celebrate the dawn. Fascinated, she moved closer. As she approached, she realized the young man was not dancing -- he was, with graceful and joyous movements, picking up objects and tossing them into the sea. Soon she realized the objects were starfish.

"Why are you throwing starfish into the sea?"

"The tide is going out and if they are still here when the sun rises they will die." And without breaking his rhythm he continued tossing them out to the sea.

"That's ridiculous! There are thousands of miles of beach and millions of starfish. You can't really believe that what you are doing could possibly make a difference!"

He smiled, bent over and picked up another starfish, paused thoughtfully, and remarked as he tossed it into the waves, "It makes a difference to this one."

Fresh Water Habitats of the V. I. Poster



Our newest poster in the Habitats of the V. I. series is now available at the Division offices in Redhook and Frederiksted, St. Croix. Once again, local artist, Theresa "Red" Fisher has captured the essence of this unique habitat. The scene depicts fresh water shrimp feeding on the

gut bottom, a water hyacinth blooming on the surface and the Little Blue Heron searching the water for its next meal, just to name a few of the species found in a fresh water gut. This poster is the eighth in the Environmental Education Program series of Game Fish and Habitats of the Virgin Islands. Since the production of the first poster in 1993, they have become a very popular educational tool. Copies can be found in offices, schools and homes throughout the U. S. and British Virgin Islands, Atlanta, Montana, St. Kitts, Antigua and Curacao. Our Miss V.I. even took sets to all the contestants in the Miss World competition in South Africa. Future posters will illustrate Seabirds and Shorebirds of the Virgin Islands.

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Trees were saved by printing on recycled paper



This newsletter was funded by the US Fish and Wildlife Service, Sport Fish and Wildlife Restoration Acts, the Caribbean Fishery Management Council and the Government of the VI.

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