

Andros Conservancy and Trust

ANCAT

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Special points of interest:

- **TWO** meter sea level rise will produce the following effects in The Bahamas:
- **25%** of airports affected
- **10%** of land area lost
- **6%** of road networks
- **11%** of Tourism resorts impacted
- **23%** of wetlands lost
- **Gross domestic product: 8% lost (that means \$84,297,758.00 yearly)**

“The Bahamas is the MOST vulnerable nation in terms of total loss through sea level rise”

CARIBSAVE: CLIMATE CHANGE, RESILIENCE & ADAPTATION

The Caribbean is the most tourism dependent region in the world, with few options to develop alternative economic sectors. Tourism is dependent on coastal infrastructure and the attractiveness of the natural coastal environment. With 80% of the land lying 1 meter above sea level all sectors of The Bahamas are highly vulnerable to sea level rise (SLR) and storm surge. Tourism dollars help to lift individuals and their families out of poverty. In the Caribbean the environment, climate, local livelihoods, and tourism are deeply linked. Caribsave has recently conducted a survey of the Fresh Creek District, 50 persons were interviewed, each representing a micro, small or

medium sized business which depends upon a healthy environment within this coastal region. Caribsave is looking to develop an approach to address the challenges that climate change presents for the Caribbean, Impacts such as fewer fish, stronger winds, sea level rise, higher tides and stronger tidal surges are predicted.

Due to the topography and the location of vital infrastructure, such as hotels, roads, airports and power stations. our island nation is greatly at risk. The Bahamas is already experiencing sea level rise and consequent coastal erosion, destructive weather systems and periods of drought.



Higher tides are predicted

flooding and coastal erosion. The time is NOW to plan and prepare for these changes to safeguard our way of life. In 2013 officials from the Caribsave project will be hosting a workshop in Fresh Creek, participants will be asked to describe how extreme weather events effect them, as this will aid the planning of community adaptation activities. The workshop will seek to instruct on how to protect assets and ecosystems on which we depend.

As sea levels rise an increasing percentage of populations will be at risk to



Climate REALITY project: We saw it, felt it, breathed it: 2012 was HOT

2012 was one of the hottest years on record. Former US Vice President, Al Gore is a world leader in the environmental field, now heading the climate reality project and warning the world that we are at a fork in the road, and accepting reality is key to making the right choice regarding climate change. His message is clear: we have the solutions at hand and the clues are everywhere, they're all consistent: **as CO2 increases, so does temperature.** CO2 traps heat, a lot of heat and the results are now evident. CO2 is caused by HUMAN pollution. He is calling on everyone to solve the climate crisis together, we have to deal with reality.



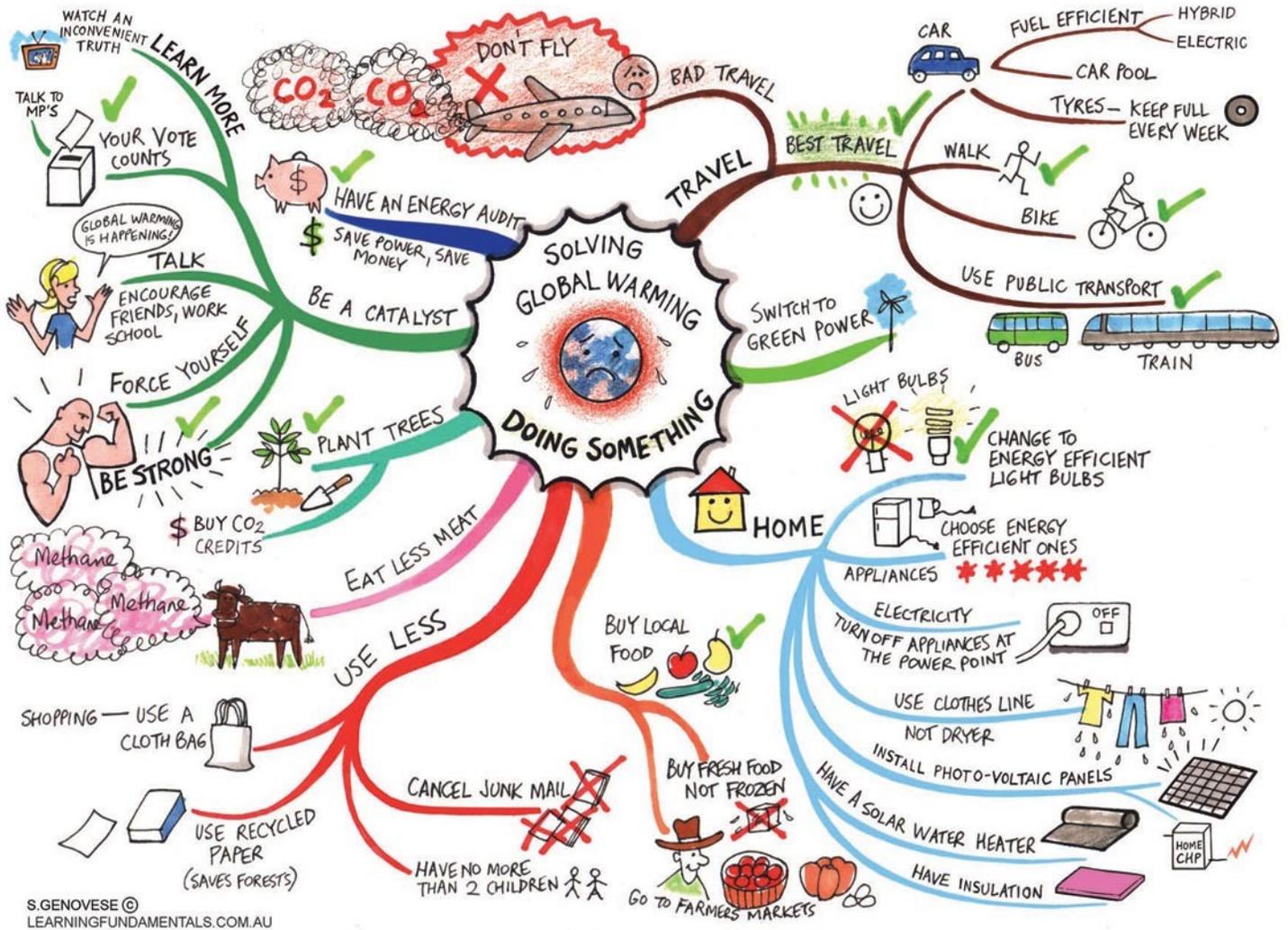
This earth is the one we have to care about, it is the only earth that we will ever have. The fact that the world's climate is changing is no longer conjecture or something that comes from computer models. We are **observing** the climate changing, it is REAL, it is scientific fact. We saw it, felt it breathed it this year: 2012 was HOT. So what can we do? For one thing we must speak up, win the conversation, don't let the

climate deniers go unchallenged. Next we must deepen our commitment by making consumer choices that reduce energy use. And then: use the media to get the message out to our leaders that they have to take the threats we are facing seriously. Instead of turning the thermostat up, we should be turning it down. We need to accept that this world is changing and we're not passing on the world we inherited to our children, We can solve the climate crisis together, says Al Gore but we have to deal with reality. This earth is the one we have to care about, it's the only earth we will ever have.

The dirty energy we use is creating DIRTY weather. Never have we seen so many challenges, all around the world there have been record climate events. Extreme weather has become the norm that we see almost everyday on the news. Record heat waves, floods and rainstorms damage homes. Crops wilt under severe droughts. Hot dry weather sparks wildfire. We are polluting our atmosphere with dirty energy like gas, oil and coal and the result is the planet heats up and we get dirty weather. For more information go to www.climaterealityproject.org and watch the symphony of science video.

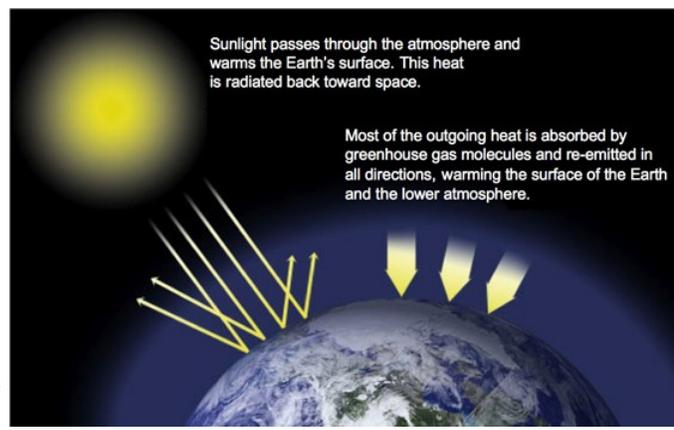


Oh YES there is LOTS that we (each one of us) CAN do to stop climate change: MAKE A COMMITMENT TO DO YOUR PART



Climate Change 101: a lesson from Bill Nye (THE SCIENCE GUY)

There are naturally occurring gases on earth such as carbon dioxide and methane in the earth's atmosphere, In themselves they aren't bad, in fact we need them in limited quantity to keep the atmosphere at just the right temperature for life as we know it to exist on earth. BUT if we produce an excess of these gases (as we have) the temperature rises (as it has). Most of solar radiation reaching Earth is absorbed by the surface and atmosphere, which in turn radiates energy out to space as infra red (heat) most heat energy from the surface is absorbed by green house gases in the atmosphere and radiated back down to the surface



the more greenhouse gases we create the more heat is absorbed and sent back to the surface to cause further warming. Recycled heat does more than bump up the thermometer, warm air has the capacity to hold more moisture and water vapour is a green house gas. So there is more warming and the water cycle is affected. More evaporation, more precipitation, more extremes in general. Humans burn fossil fuels, actually we rely on carbon based fuels for 85 % of our energy. We produce 55 billion tons of CO2 each year, 55% is absorbed by the land and oceans AND **the rest remains in the atmosphere**. In the last 40 years the levels of atmospheric CO2 has grown and is now twice that of the planet's long time natural levels, now we are seeing temperature increases and 4% more moisture in the atmosphere which is leading to **DRAMATIC WEATHER** ... floods, droughts, storms and hurricanes and fires., of a frequency and intensity which we have never seen before. We humans through our burning of dirty fuel set this change in motion, this is climate change.

Protect MANGROVES because they protect us

Mangroves live life on the edge. With one foot on land and one in the sea, these botanical amphibians occupy a zone of heat, choking mud, and salt levels that would kill an ordinary plant within hours. Yet the forests mangroves form are among the most productive and biologically complex ecosystems on Earth. Birds roost in the canopy, shellfish attach themselves to the roots, juvenile fishes live within the protection of their roots. These plants are also land builders par excellence. The plants' interlocking roots stop



sediments from coursing out to sea, and their trunks and branches serve as a palisade that diminishes the erosive power of waves. Where mangrove forests are intact, they serve as natural breakwaters, dissipating the energy of waves, mitigating property damage,

and perhaps saving lives. Lets add the fact that these forests are highly effective carbon sinks, they absorb carbon dioxide, taking carbon out of circulation and reducing the amount of greenhouse gas. If mangroves were to become recognized as carbon-storage assets, that could alter the way these forests are valued. However the potentially disastrous problem of rising sea levels is a REAL threat to mangroves. Standing as they do at the land's frontiers, mangroves will be the first terrestrial forests to face the encroaching tides.

Forests of the tide

“At the intersection of land and sea, mangrove forests support a wealth of life, from starfish to people and maybe more important to the health of the planet than we ever realized”

By Kennedy Warne
National Geographic

Light your night with SUN power



Solar powered lights

Using solar powered lamps cuts down on batteries and electricity usage. Small solar panels charge during the daytime and are ready for use at night. The flash light shown at right has the crank wind up mechanism as well as a solar panel, one minute of winding the crank gives light for three minutes. The additional boons are that this flash light also has a radio built in and it can be used to charge up your cell phone: 3 minutes winding will give you 2-8 minutes of talk time. These solar powered and windup lamps/chargers and radios are a must for cutting down on energy usage and disaster preparedness.. Great energy saving ideas for every one and easy ways to cut down on your energy use and garbage.



“Clearly we need more initiatives to quickly increase the use of wind and solar power; they will cut costs, increase our energy independence, and our national security and reduce the consequences of global warming.” Secretary of State, Hilary Rodham Clinton

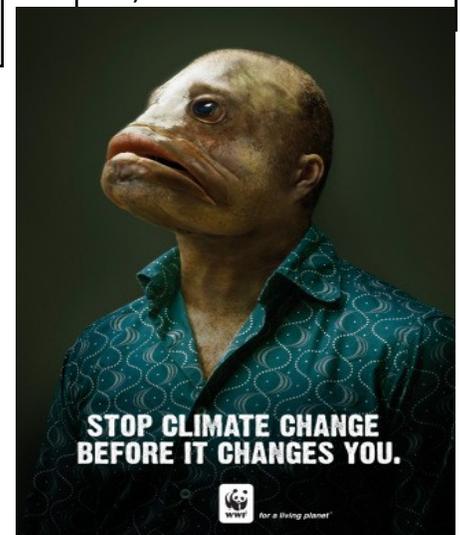
Plant trees to absorb CO2 : papaya

Because carbon dioxide is the most important greenhouse gas, planting trees and other plants can slow down global warming. Plants take in carbon dioxide and release oxygen. They use carbon to build their own tissues and return some of it to the soil in a process called sequestration. Deforestation of rain forests is a large contributor to global warming and CO2 emissions, but planting new trees, even in your own backyard, can help to offset this. Many Bahamian plants have medicinal value for example the papaya has a delicious fruit, grows easily in our soil and has high medicinal value.



Papaya can be used as an aid to digestion. The milk or white juice diluted with water can be drunk for indigestion. A slice of the green fruit placed on ringworm will make it disappear, along with chiggers. The seeds can be swallowed and are good for ridding the body of worms. The flesh of the fruit and the powdered leaves are used as a meat tenderizer.

The meat of the fruit can be applied to an ulcer and left for 24 hours, it will slough off and leave a clean surface. It has also been injected into a slipped disc with some success.



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Ancat's mission is to protect, preserve, enhance and restore the natural resources of Andros Island and its marine environment, through education, conservation and management for future generations.

Check us out on:

facebook.

Andros

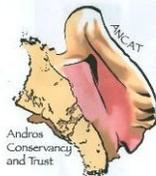
Conservancy and Trust

FUN RUN WALK

The National Coastal Awareness team chose the route from Fresh Creek to Calabash Bay, Andros for the 6K fun, run, walk in November. It was great to meet the participants from both Andros and New Providence and hope you all stick with the walking for a healthier body and mind.

DISCOVERY CLUB AT CENTRAL ANDROS HIGH

The Discovery club is a great way to learn about the outdoors and the natural environment. Encourage your child to participate and adults, please volunteer to help with field trips.



Ancat is a NON profit, non governmental conservation organization which was started in 1997 by a group of concerned Androsians who envisioned a future for Andros which secures and embraces our natural environment for present and future generations. Ancat is working on the following projects : implementation of a co management plan for the Central Andros National Parks, creek rehabilitation In Fresh Creek District, development of a sustainable livelihoods program and an educational program with a summer school. If you would like to support our work, all donations would be most gratefully received.



National Bench Project

Four Androsian men were invited by Antonious Roberts in December to participate in the national bench project. These men will see the products which can be made from the trunks of trees which have been taken down during lot clearing or invasive species removal.

Why not become a member of Ancat? We now have 767 members.

RBC and Cousteau's Blue Hole

Ancat is proud to announce further support from the Royal Bank of Canada Blue Water Project. RBC has decided to assist with the building of a swimming deck and the opening of a trail to the Cousteau's Blue Hole which is found within the Blue Hole National Park, Andros This will be one of the new must see areas of Andros, make sure you go with a certified guide who will be able to share the story of this unique blue hole with you.

Coral nursery on Andros Barrier Reef

Coral reefs all over the world are suffering the impacts of climate change, the major problems are coral bleaching, infectious disease outbreaks and ocean acidification. The Andros Barrier reef is in a good condition, although there are signs of degradation. Ancat along with TNC, BNT and Greenforce are working to protect the reef through the development of a coral nursery. The coral farm is located at Hump Cay, it is 10—12 feet deep and hosts 15 blocks, fitted with PVC pipes for the coral to grow in. The picture on the left shows Peter Douglas planting elkhorn coral fragments. The other species planted are staghorn and finger corals. These blocks will be left intact while the coral grows and replaces corals which have been killed. This is an ongoing project which is replicated in an area off the island of New Providence.



Habitat Restoration

The Fresh Creek Marine Restoration project is continuing with the clearing of invasive species at the harbour mouth by the Andros Town Light-house. Here Sheldon Clarke and his men have been busy removing and burning two invasive species, the casuarina tree and the scaevola bush. The scaevola is a dense rounded bush with bright



CASUARINA

green, waxy, fleshy leaves. These plants will quickly take over a beach front, killing native vegetation.

The Casuarina is another invasive species which is spreading quickly through out the island. This plant grows into a tall tree with needles which shed frequently and cover the ground around the base of the tree, preventing other vegetation from taking root. These trees also cause beach erosion.



SCAEVOLA

TOURS OF ANDROS

Ancat is developing a host of tours for visitors to Andros and Androsians to enjoy. If you are a walker, hiker, camper, an adventurer or just want a quick jaunt into nature, then please give us a call and we will arrange a tour for you.

Presently we are developing these tours:

1. Andros Town history and Androsia
2. Captain Bill's Blue Hole
3. Cousteau's Blue Hole (coming soon)
4. Gobi Lake
5. Bone fishing in Fresh Creek
6. Snorkeling the Andros Barrier Reef
7. North Andros: Morgan's Bluff
8. Wild hog hunt

Call two days in advance to make reservations. Prices will be given on request.