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THE PROSPERITY ISSUE

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UNDERSTANDING TCM IN MODERN SOCIETY

This issue kicks off a series of articles on Traditional Chinese Medicine

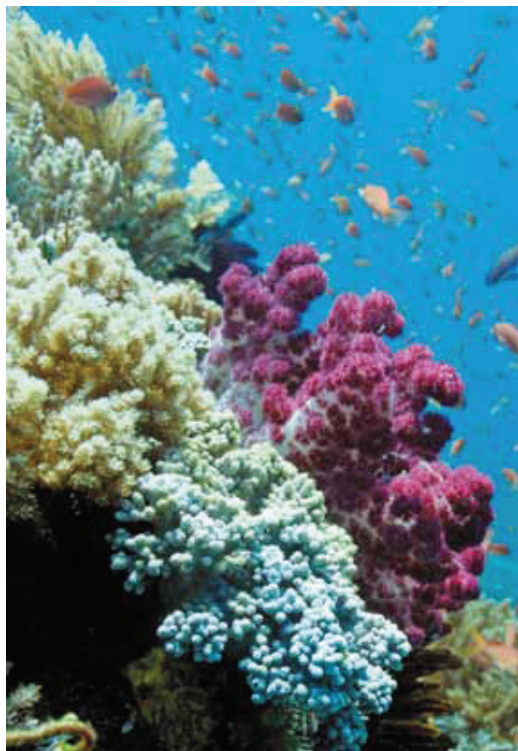
It doesn't take an army to save the coral reefs, all it needs is one person to do their part and set it in motion.

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Save The Coral Reefs

YOU Can Make A Difference!



Thirty-two years ago, 13-year old Severn Suzuki addressed the Convention On Biodiversity at Rio. She pleaded with humans to "stop breaking things that you don't know how to fix." We may not know how to fix reefs, but here are a few simple things we can stop doing that will help protect and improve the sustainability of coral reefs and the sea they live in.

1. Don't trample your grandmother's flower garden

Unlike mountains, coral reefs are living structures built by growing animals and plants. This complex physical structure is home to many different species of fish that live within and around different species of corals; much the same way insects and birds live in different species of trees. When coral cover drops below about 50 percent, the biological relationships begin to unravel and the reef approaches its tipping point. Additionally, fish and other herbivores prevent marine plants and algae from overgrowing corals in much the same fashion as ants protect many species of plants from herbivores in the tropical rain forest.

Anchoring on a reef is like home wrecking; walking on reefs is like trampling your grandmother's flower garden; and bomb fishing is tantamount to harvesting mangos with hand grenades. We need to protect the living structure of the reef with proper charts, mooring buoys, simple training programmes for divers and snorkelers, and less violent fishing practices.

2. Don't litter. Pick up your trash because the ocean begins at your front door

Imagine being wrapped in a giant plastic bag that prevented you from eating and breathing. Trash tangles on corals damaging their surfaces,



So why should we care?

The economic valuation of marine industries is well into trillions of dollars, with coral reefs alone worth billions. They feed hundreds of millions of people, and provide numerous ecological goods that serve humanity. The collapse of coral reefs portends a change in the vitality of the sea. Like the canary in a coalmine, reefs are the harbingers of a deteriorating environment.

preventing them from feeding and smothering their tissues. Unlike orange and banana peels, apple cores, or a dead fish, plastic does not rot. Plastic trash never goes away; it just breaks down to smaller and smaller particles that eventually enter the food web when they are mistaken for food by plankton. So that plastic bag, coffee cup, or candy wrapper you just dropped on the ground stands a very good chance of being washed into the ocean.

As this planet we call home, spins ever faster on a collision course with humanity, we need to work harder, smarter and more ferociously than ever towards a sustainable future. The coral reef crisis is deepening and I believe we need to redouble our efforts to develop more committed public policies, engage stakeholders, and utilise economic models that actually save reefs.

Unlike higher animals and plants, the body of a coral is a surface, there is no body inside! The coral animal is confined to the very near surface of the rock we think of as coral. Imagine if your body was your skin, with nothing inside except a hard skeleton. Surface cuts would damage your very body, not just your skin. Simple cuts and bruises become life-threatening injuries, while sediment falling on the surface smothers the coral tissue. We need to be mindful of our trash: Recycle and use your consumer power to promote environmentally friendly packaging.

It's not that difficult to realise that individual behaviour is the beginning of turning the crisis around. Like politics, ecology is a local process. Every organism lives its life in a local setting much like we do in our homes, neighbourhoods, and everyday haunts. No, it's not rocket science, just plain old common sense and respect for our home, Earth. 🌊

3. Fertiliser is not necessarily a good thing

The best coral reefs grow in super clear tropical waters that are extremely low in nutrients and sediments. Reef plants and animals trap and recycle nutrients within the reef system similarly to forest, grasslands, and any other terrestrial ecosystems, only more so. Human waste and terrestrial soils are rich in the very nutrients that are normally limiting for reef productivity. When we dump out waste into the sea or promote sediment runoff through land development, we are over-fertilising the sea. This process, termed nutrification, overdrives the production of marine plants (microscopic and macroscopic algae) that crowd and eventually overgrow corals.

4. Mass kidnappings can lead to a breakdown of society

Think about what would happen to our communities if there were wide-scale random kidnappings. Civil society would break down as the people who do the landscaping, garbage collection, and health care begin to disappear. With fewer police, crime would become rampant, businesses would fold with too few consumers, and schools would close as children disappear. Over-harvesting fish and other organisms from reefs have exactly the same impact on the reef and the ecological goods and services required to keep it healthy.

"No-take" marine protected areas work because all natural populations tend to produce more individuals than can be sustained by the environment. Decreased fishing pressures will promote overcrowding which naturally pushes fish out of the protected area into the clutches of waiting fishers. On a larger scale, ocean regenerative areas create breathing room for nature. Given half a chance, most reefs might be moved along a regenerative path of self-restoration, provided environmental conditions will allow them to exist.



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