



Coral bleaching

By Tim Luan.

Page 1

Table of contents

What is coral bleaching.....3

Cause and effect (coral bleaching).....4

How to prevent coral bleaching.....5

Another way to prevent coral bleaching.....6

Bibliography.....7

About the author.....8

What is coral bleaching???

Coral bleaching means, when the water gets warm, living in their tissues causing the coral to turn completely white, this is called coral bleaching. But it's still alive, but they are under more stress and are subject to mortality. Corals reefs grow in all the tropical ocean basins, between roughly 25°N and 25°S. They are concentrated in locations where the mean annual surface ocean temperatures are in the range of ~70-85°F, and where temperatures are relatively constant year-round. In other words, they live in places where dramatic seasonal variation is minimal. Corals are very sensitive to temperature changes, so they thrive in regions where they don't experience much day-to-day change in warmth.

Cause and effect (Coral bleaching)

The phenomenon of bleaching is of widespread global occurrence. Bleaching of corals is either due to loss of zooxanthellae or reduction in chlorophyll per zooxanthellae. As a result, the coral tissue loses its colour exposing white skeletal calcium carbonate. Three different mechanisms which could account for the reduction in zooxanthellae have been proposed (Brown *et al.* 1995). These are i) the zooxanthellae may be degraded *in situ*. Distorted zooxanthellae have been detected in partially and full bleached material, ii) release of zooxanthellae from endoderm into coelenteron of the polyps and iii) release of intact endodermal cells with their intracellular zooxanthellae out of polyp tissue. Elevated temperature plays a critical role in bleaching. Bleaching in turn affects coral growth, reproduction and regeneration. The response of different coral species towards bleaching differs. It affects colony density and coverage.

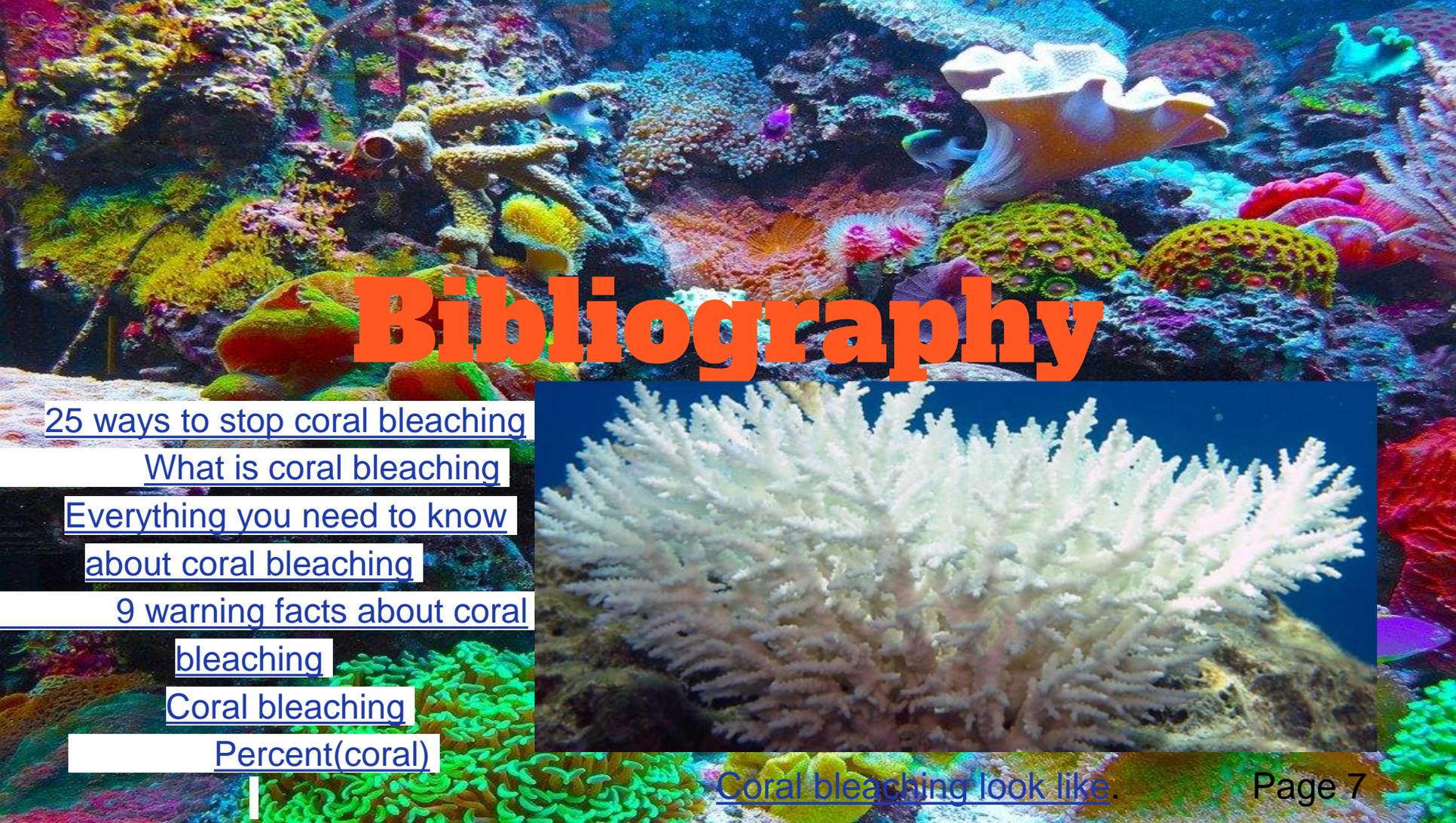
How to prevent coral bleaching!!!

No matter where you live, near the coast or hundreds of miles away, there are several things that you can do to keep coral reefs healthy. Many dangers to coral reefs occur directly on the water but many also come from activities that occur on land, even those far from the coast. Below are lifestyle changes that anyone can adopt that can make a difference for the health of our coral reefs. We're not doomed to lose all corals to bleaching, but we need to act now if we want to protect coral for future generations.



Ways to prevent coral bleaching

your rivers and streams clean by volunteering to pick up trash in your community. Check with your local environmental organizations for annual trash clean ups and make sure to check the annual International Coastal Cleanup. Minimize use of fertilizers. EPA diver swimming over a coral reef outcrop showing stony corals and soft corals (sea fans). The overuse of fertilizers on lawns harm water quality because nutrients (nitrogen and phosphorus) from the fertilizer are washed into waterways and eventually end up in oceans. These nutrients pollute the water and can harm coral reefs. Use environmentally-friendly modes of transportation. Instead of driving a car, try to walk, bike, or use public transport (like buses and trains) more often. If you are



Bibliography

[25 ways to stop coral bleaching](#)

[What is coral bleaching](#)

[Everything you need to know
about coral bleaching](#)

[9 warning facts about coral
bleaching](#)

[Coral bleaching](#)

[Percent\(coral\)](#)



[Coral bleaching look like.](#)



About the author

I'm 8 1/2 years old, my favorite color is yellow, my school is Amerman elementary school, Michigan. my favorite fruit is oranges. I'm a very nice/kind/helpful kid, my name is Tim Luan.

Page 8