

Coral Destruction around Mahoma Island



Issues:

- Temperature increase as a result of global warming leading to bleaching
- Cyanide and dynamite fishing
- Crown of thorns starfish (*Acanthaster planci*) - invasive species
- Tourism: scuba diving, boats and damage to reef

Introduction/Background Information:

- Mahoma Island residents have noticed that in recent years much of the beautiful coral that has attracted tourists to their island has begun to die. It is thought that this is due to a rise in the temperature of the sea, which causes the coral to expel its symbiotic algae and 'bleach' leading to its death. Whole sections of the reef have now bleached and the local government is worried that this will put tourists off coming to the island.
- Collecting fish for the aquarium trade is tricky; fish are really fast. However, if you spray the area with cyanide it slows the fish down and allows them to be collected more easily. They only live for two or three weeks, but this is more than enough time for them to be sold to some unsuspecting person in America or Europe. As well as killing the fish (eventually), it also kills any nearby coral.
- In light of the dwindling fish stocks, local fishermen have resorted using dynamite to stun fish making them easy to collect for food and in the process damaging the reef and other organisms.
- The crown of thorns starfish population has exploded in recent years. This starfish is well protected with dangerous spines and has an incredible appetite for coral. These pesky starfish are busy eating the coral reef.
- The number of divers has been great for the local economy, but careless divers keep knocking the coral and breaking bits off. This has caused a lot of damage to the reef over the last few years.

Key Terms:

- Giant Triton - a type of large sea snail that eats the Crown of Thorn's starfish.
- Crown of Thorn's starfish - a type of very dangerous, hard to kill, starfish that eat and destroy coral reefs.
- Gyre - a movement of water through the oceans, it is a type of ocean current.
- Aquarium - a large fish tank in someone's home.
- Cyanide - a type of very dangerous poison.

Past Actions:

- The local government has tried to stop the spread of the Crown of Thorns starfish by collecting them using trained divers. However, the local female divers continue to collect the Giant Triton because it's part of their customs, a practice which has been handed down through the generations. The government did put a ban on the collection of Giant Triton, but it was just ignored.
- The government has paid a team of five divers to try and clean up the rubbish on the coral reef and the beaches. This worked for a week or so, but then the rubbish came straight back.
- No efforts have been made to control the sale of marine fish or corals as the business makes too much money for the island to stop it. They are aware that the collection teams use cyanide, and the government has asked them to stop, but this warning has just been ignored.
- Nothing has been done about the number of divers because they bring too much money to the Island.