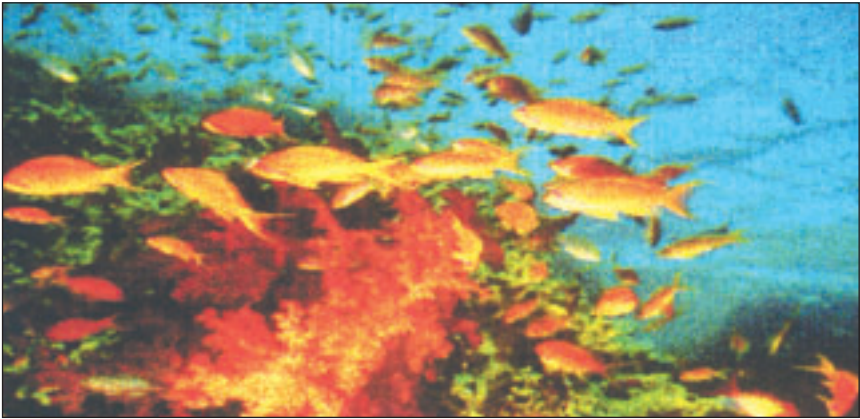




CORAL REEFS



Nature and importance of coral reefs

Coral reefs are unbelievably complex ecosystems, that provide home to an amazing variety of creatures. The level of biodiversity of such ecosystems is exceeded only within the collective tropical rainforests of the world.

Coral reefs create coral islands and contribute to the creation of sand beaches. As well, they serve as pro-

tective barriers for many land areas, coastal marshes, and mangrove swamps. But most important they are incredibly productive of life in a myriad of forms, both beautiful and beautifully grotesque.

There are thousands of coral species, some reef building, some not. There are a seemingly endless variety of coral forms and structures : platelike forms, fans, whips, staghorns, brains - some reaching to thousands of years in age.

Coral reefs grow only in warm, shallow waters often near to the maximum temperatures and minimum oxygen levels that they can tolerate. Some varieties can withstand temperature ranges from 13 degrees celsius to 38 degrees Celsius.

Problems facing coral reefs

There has been increasing concern in recent decades for the health of the biological communities living within coral reefs and for the reefs themselves. A serious threat to the coral reefs and their inhabitants involves the variety of direct and indirect human assaults taking place in many locations. Five kinds of human threat can be identified. The five are :

- 1 - Direct assaults such as mining, dredging, and turbidity and sedimentation from land - based fores-

try and agricultural activities.

2 - Overfishing and poor fisheries practices.

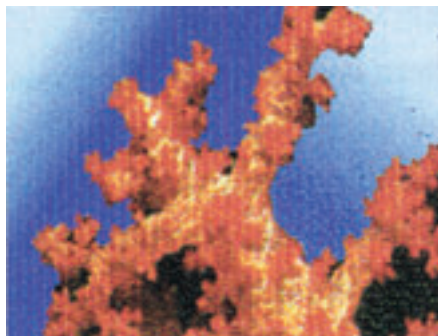
3 - The introduction of sewage and / or toxic chemicals.

4 - Ecologically harmful removals of animal species from coral ecosystems.

5 - The possible effects of climate warming.

Threats facing coral reefs resulting from overfishing

Recreational overfishing has been a problem in some locations, particularly the hunting of large, slow-moving species with spear guns. Commercial fishing is more problematic generally and this includes the catching of fish for the aquarium trade. The greatest threat to the reef itself associated with fishing is the practice of dynamite fishing, taking place in Tanzania and the Philippines.



Coral reefs and harmful chemicals

There are a variety of ways that humans introduce harmful chemicals to the coral reef environment. The most common assault is via sewage - billions of liters of sewage are emitted into the ocean environment daily. In addition, excess nutrients are also introduced via agricultural runoff. Coral reefs are vulnerable to excessive nutrients which result in too thick algae and growth of seaweed. Another common source of chemical assault is via oil spills.

Do you know ?

- ◆ That the Red Sea area in Egypt is one of the most famous location of coral reefs in the world.
- ◆ That coral reefs are located throughout the Tropical Seas within the waters of 109 nations.
- ◆ That Coral reefs as ecosystems have existed for perhaps 450 million years.
- ◆ That Charles Darwin was among the first to realise that coral were not in themselves a type of plant life.

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