

# CORAL REEFS

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## Presentation Overview

- What are Coral Reefs?
- Importance of Coral Reefs
- General Threats
- Overfishing and Possible Solutions
- Bleaching and Possible Solutions
- Conclusion



# What are Coral Reefs?



Finger Coral



Lobe Coral

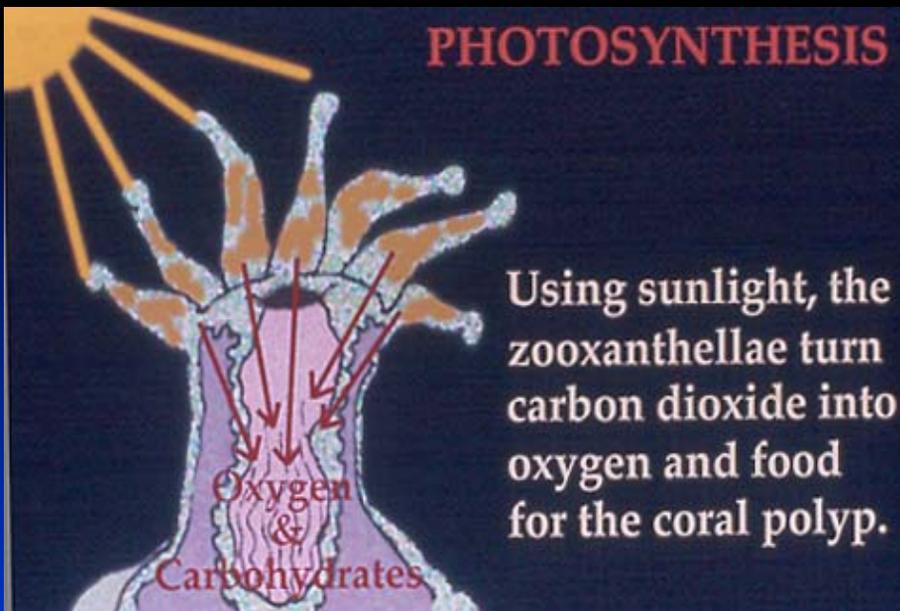
- Massive living calcium carbonate structures primarily built by corals
  - ◆ Corals are colonies of invertebrate animals called coral polyps



Cauliflower Coral



Rice Coral





## Importance of Reefs

- Function as breakwaters
- Build islands
- Act as producers and recyclers
- Provide food and shelter for plants and animals
- Provide aesthetic beauty and enjoyment
- Stimulate local economies
- Act as a source of new medicines



## Threats to Reefs

- Overfishing
- Human Population Growth
- Industry/ Urban Pollution
- Sediment/Turbidity
- Nutrient Enrichment
- Invasive Species
- Tourism (Coral Contact)
- Lack of Education
- Laws/Regulations/ Enforcement
- Global Warming
- Bleaching



# Primary Threats to Reefs for this Presentation



Overfishing



Then

Now



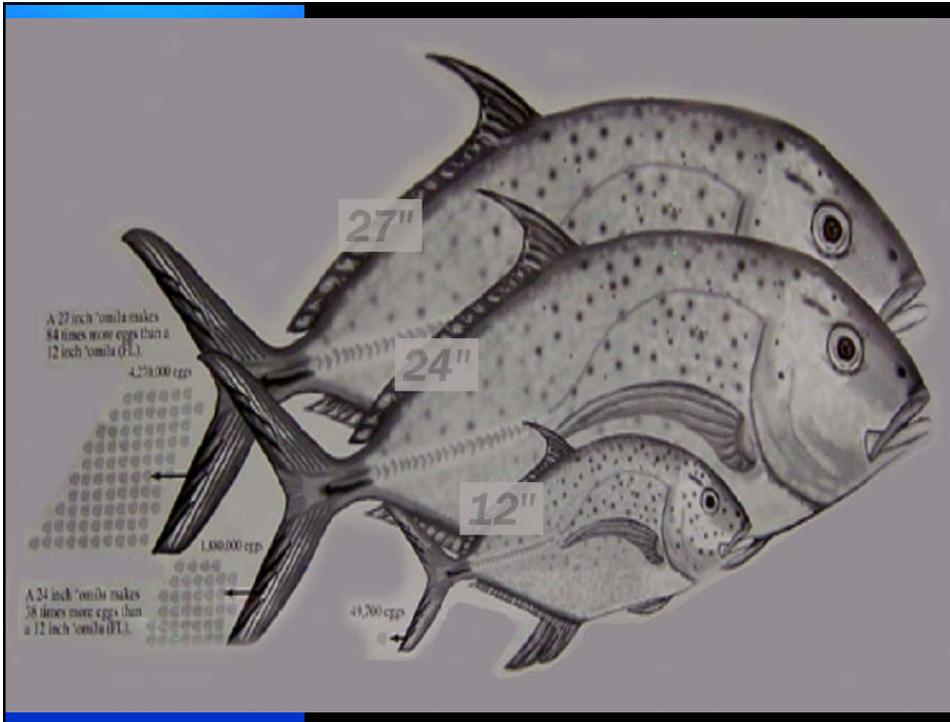
Bleaching

## What is Overfishing?

■ Excessive fishing for:

- ◆ Sport
- ◆ Aquarium collection
- ◆ Commercial
- ◆ Subsistence





## How WE can help...

- Raise awareness
- Testify
- Support fishery management areas
- Purchase captive raised fish
- Research seafood choices

Otherwise noted:

### Public Meeting Schedule to Discuss the Proposal to Ban Lay Nets

January 5, 2004, Monday, Wa'anae, O'ahu  
Wa'anae Library (6:30 to 9), 85-625 Farrington Hwy.

January 20, Tuesday, Lih'u'e, Kaua'i  
Wilcox Elementary School Cafeteria

January 22, Thursday, Kailua-Kona, Hawai'i  
Kealahou High School, 74-5000 Puohuluhuli St.

January 23, Friday, Hilo, Hawai'i  
Waiakea High School, 155 W. Kawili St.

January 26, Monday, Moloka'i  
Mitchell Pauole Center, Kaunakakai

January 27, Tuesday, Lana'i  
Lana'i Public Library, Lana'i City

January 29, Thursday, Maui  
Maui Waena Intermediate School, 795 Onehee Ave., Kahului, Maui

January 30, Friday, Windward O'ahu  
Benjamin Parker School, Kane'ohe, O'ahu

### HAWAII SEAFOOD WATCH POCKET GUIDE

MOCK-UP 10/7/03

#### Best Choices

Clams (farmed)  
Crab: Dungeness  
Crab: *Kona/Papaikualoa* (Imported)  
Halibut: Pacific  
Mussels (farmed)

## What is Bleaching?

- *Zooxanthellae* leave or are expelled from coral.
- Coral skeleton is visible through the transparent skin.
- Coral lacks inputs from *zooxanthellae*.
- Coral dies if *zooxanthellae* are not replaced.



## What Causes Bleaching?

- Bleaching is a natural phenomenon.
  - ◆ Temperature change
  - ◆ Salinity change
  - ◆ Disease
  - ◆ UV Exposure
- Anthropogenic influences



# How *WE* Can Help...



## ■ Reduce Global Warming

- ◆ Energy conservation
- ◆ Recycling
- ◆ Reducing air pollution



# Conclusion

Help **SAVE** our **REEFS!**



Do your part today!



# Acknowledgements

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