

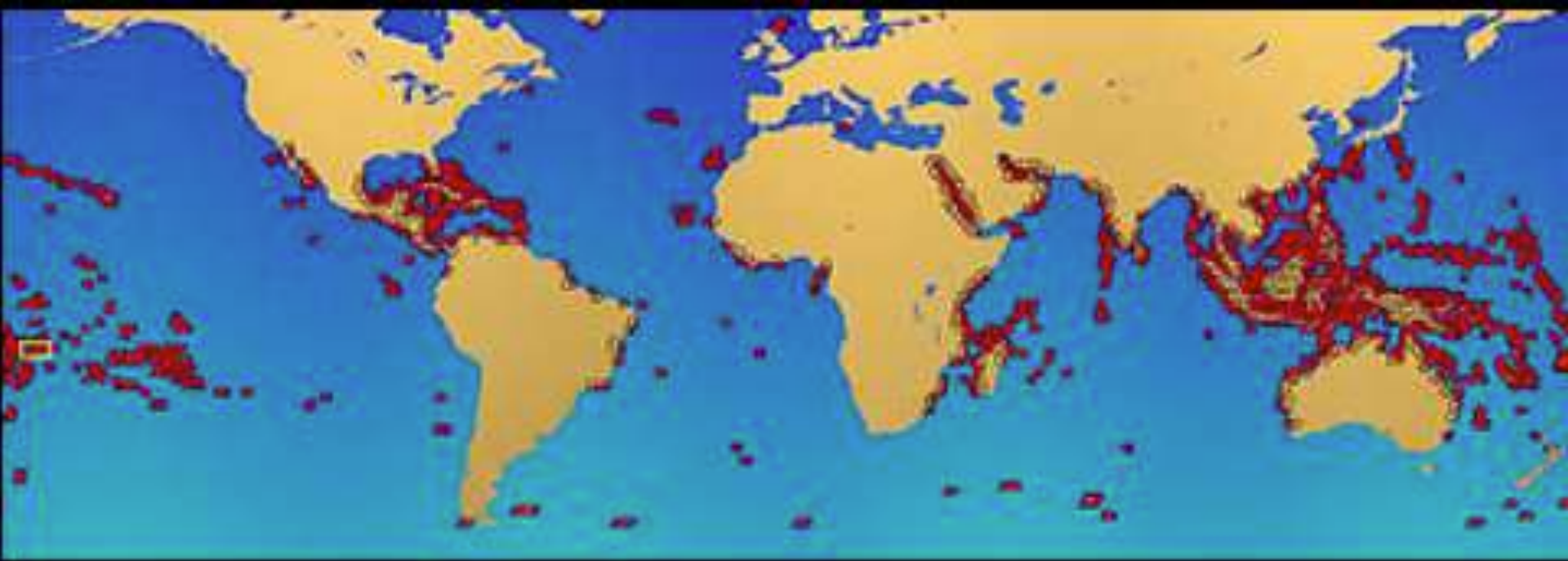


Coral Reefs of the World

Presentation for
CarSIF Workshop
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Ann Sutton Ph.D.



Where are coral reefs found?



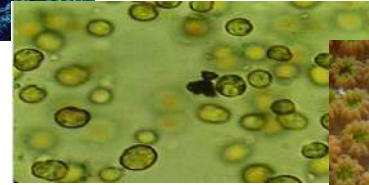
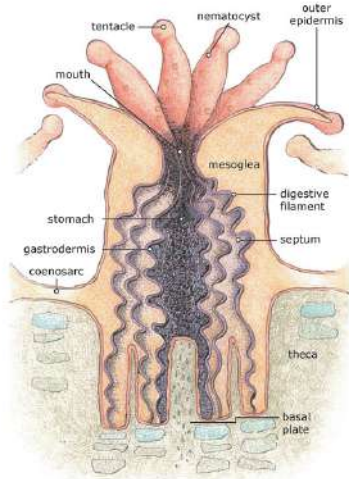
Coral reefs are found in the tropics where sea water is warmer than 18 degrees C. They cannot grow below 70 m deep because they need sunlight.

What are coral reefs?

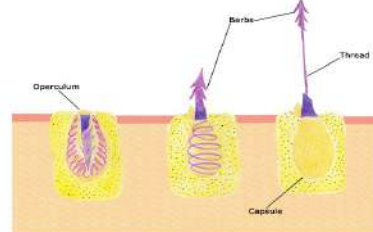
Coral reefs are made up of millions of small animals called polyps that live in colonies.



Polyps use their tentacles to catch small animals and detritus.



They have stinging cells to kill their prey.

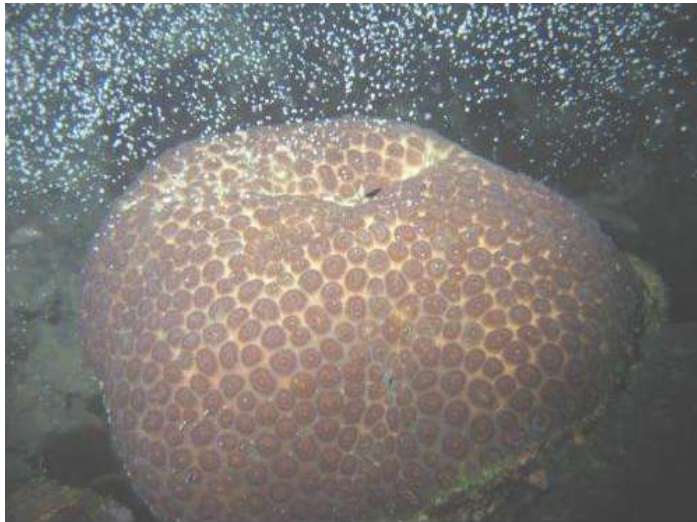


They also contain photosynthetic green zooxanthellae.

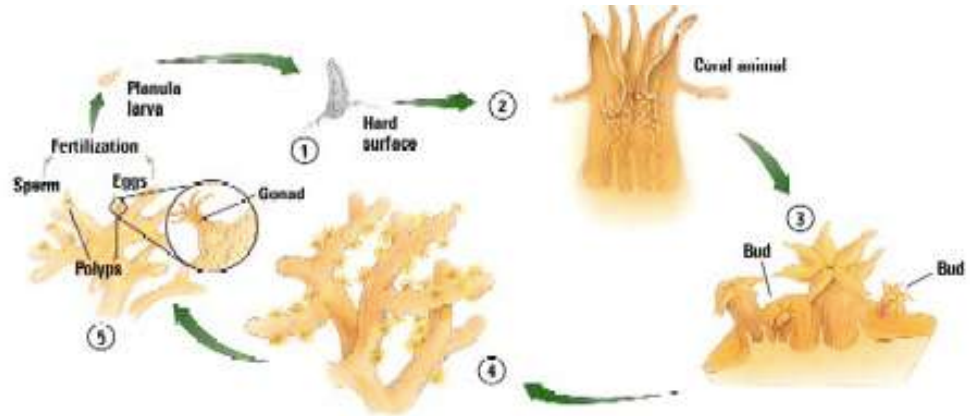


How do coral reefs form?

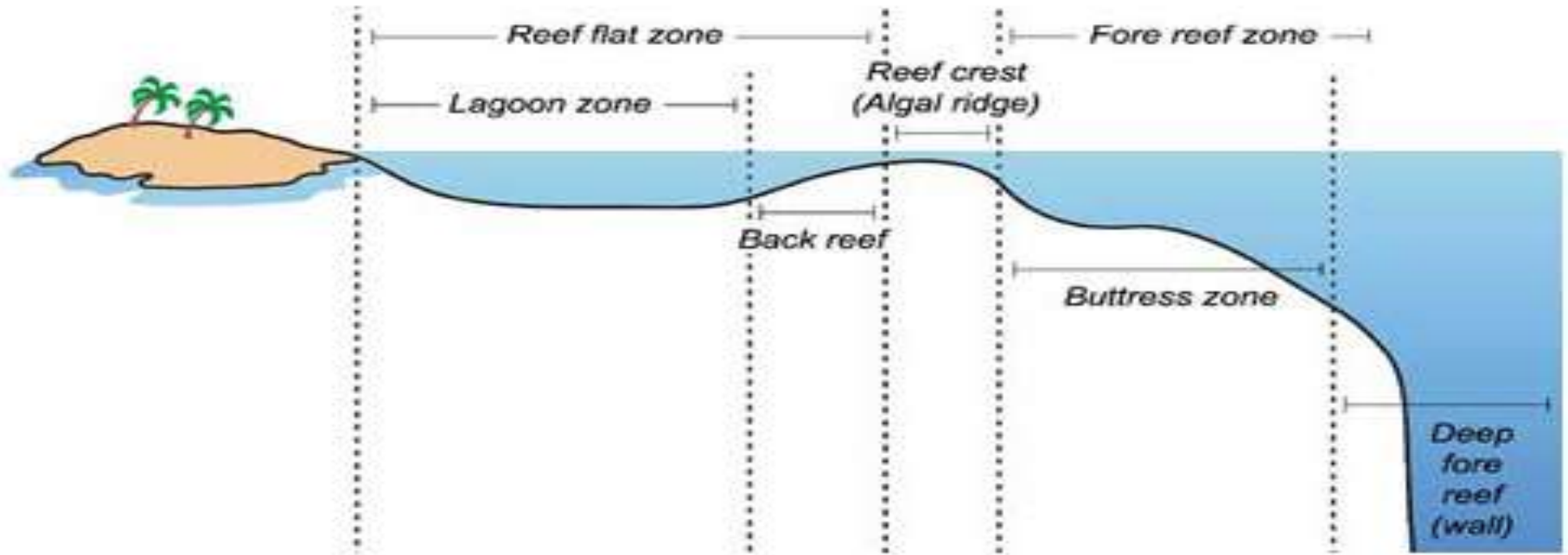
Coral reefs form when free-swimming coral larvae attach to rocks and start to grow. Their calcium carbonate skeletons form the reef.



Goniastrea aspera releasing egg sperm bundles. Credit: Andrew Baird



Where do coral reefs grow?



Corals grow very slowly

Branching corals grow up to 10 cm per year.



Brain corals grow about 0.3- 2 cm per year



It takes 1000's of years for a reef to form.

Why are coral reefs important?



Support fisheries



Most fishable species in the Caribbean depend on reefs.

Support biodiversity



- Many species of animals and plants depend on reefs

1,000s of species of plants and animals



- Algae, sea grasses, crabs, shrimp, sponges and many other things

Support tourism



- Coral reefs contribute US\$35.8 billion globally per year
- Diving, snorkeling, glass bottom boats

Protect coastlines



- Reefs break the force of waves, buffering 97% of energy
- They protect coasts from damage and erosion
- About half of Jamaica's population lives near coasts protected by reefs

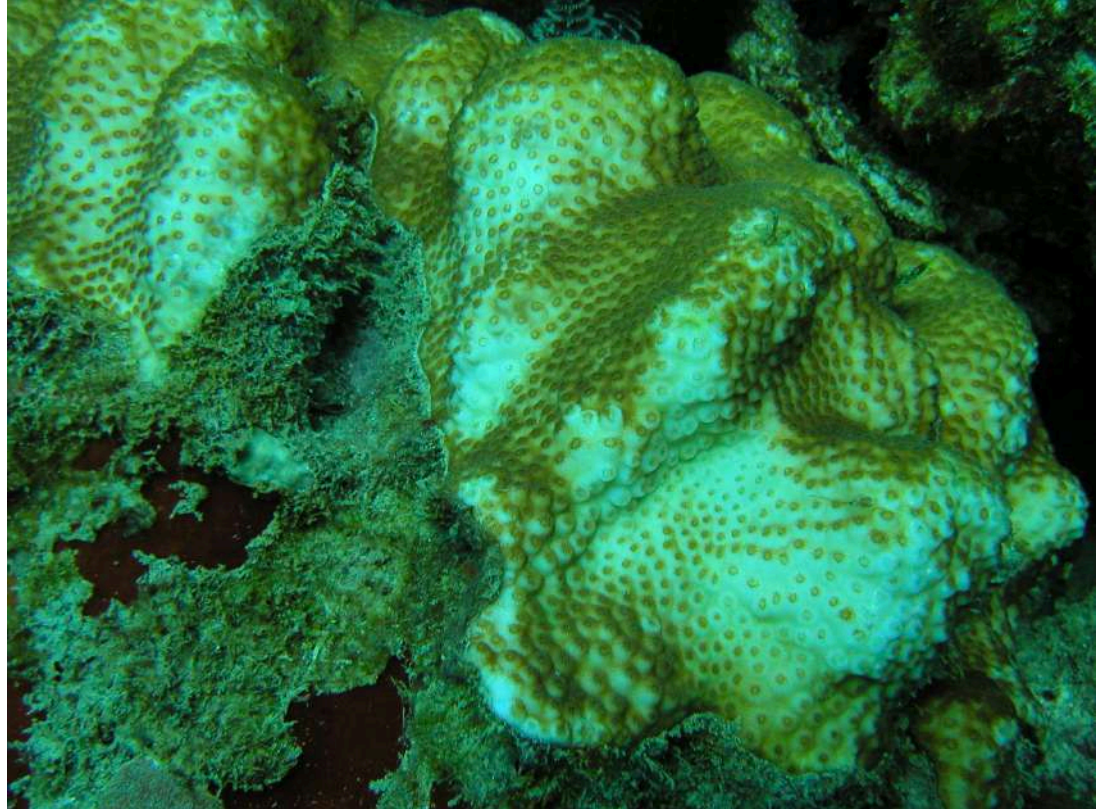
Coral reefs are the medicine cabinets of the future



- Drugs for cancer, arthritis, viruses and other diseases are being developed from coral reef animals and plants.
- Medicinal supplements
- Pesticides
- Cosmetics

All the world's coral reefs could disappear in 20 years

- Pollution
- Global warming
- Disease
- Overfishing
- Bad fishing practices
- Physical damage



How can we save reefs?

- Protected areas
- No take zones
- Reduce pollution
- Increase awareness
- Restoration
- Monitoring



Let's see what we can do!

