

Artificial & Natural Ecosystems

By Anne Gillis & Emily Silliker



Natural vs. Artificial

- **Natural ecosystem** is a natural unit consisting of all plants, animals and microorganism .
- A place where plants and animals are dependent upon one another.

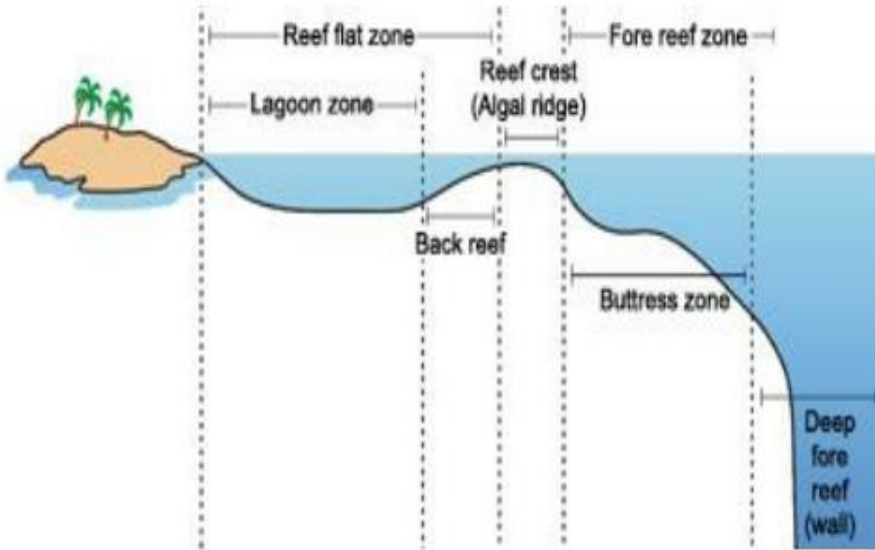


- **Artificial ecosystem** are created by human beings.
- Where management, balance of the nature is disturbed regularly.
- Examples; sugarcane, rice-fields, wheat, gardens, dams, and aquariums.
- The basic biotic and abiotic components are defined by man in artificial ecosystem.



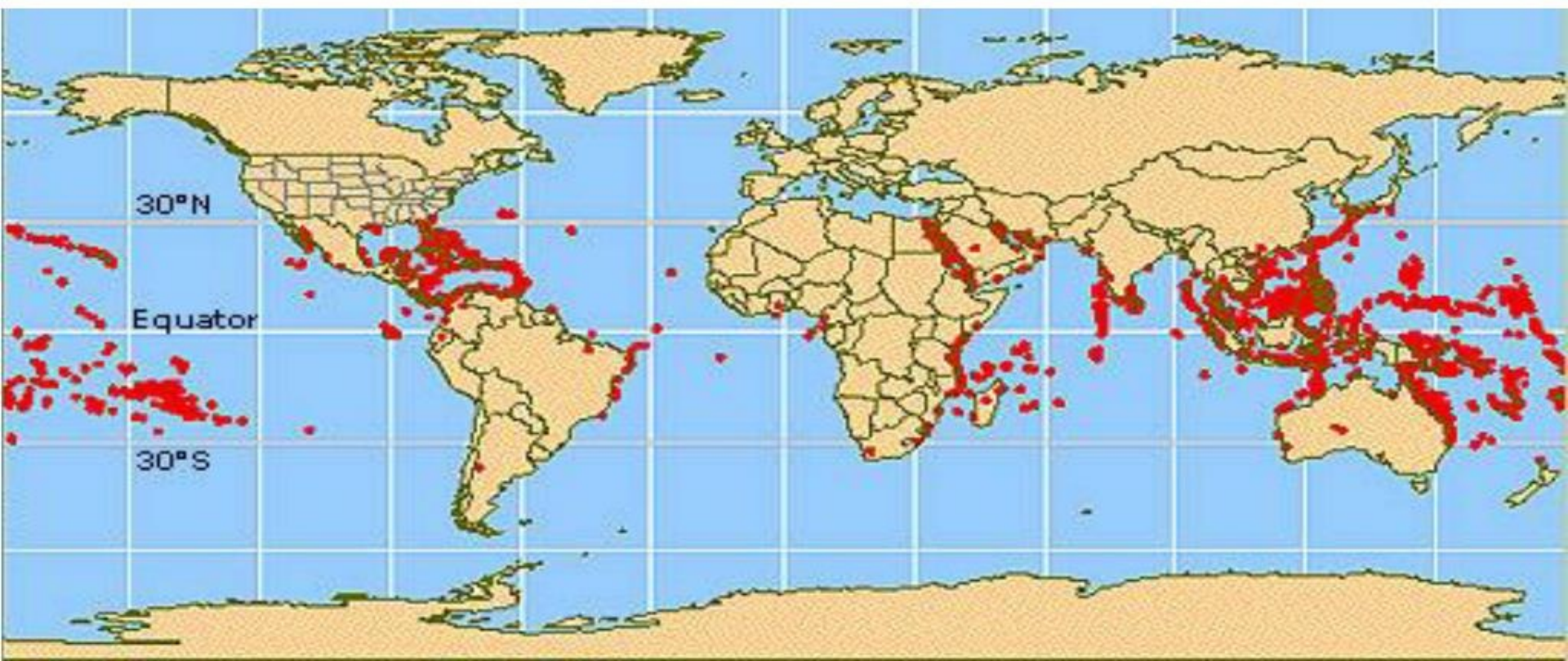
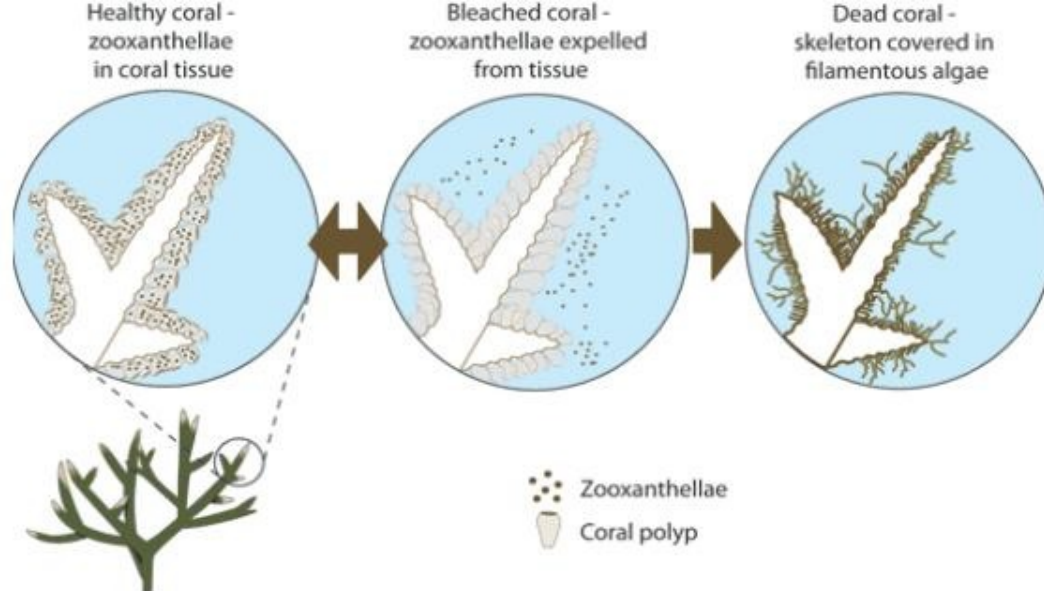


Natural Coral Reefs



Coral reefs are underwater structures made from calcium carbonate secreted by corals.

- **Coral reefs** are underwater structures made from calcium carbonate.
- Corals are colonies of tiny living animals
- Coral is formed by polyps
- Carbonate which provides the structure for the body of the coral.
- Coral reefs are among the oldest ecosystems on Earth
- Coral reefs are the largest living structure on the planet.
- Without the existence of coral reefs, parts of Florida would be under water.



Artificial Coral Reefs

- An artificial reef is a human-made underwater structure.
- Artificial reefs can be built in a number of different methods. Many reefs are built by deploying existing materials in order to create a reef.
- Some man made coral reefs conduct a charge to attract calcium.
- Examples; old wrecked cars, huge bridges, military tanks, docks, old boats, decommissioned ships, and obsolete oil rigs!





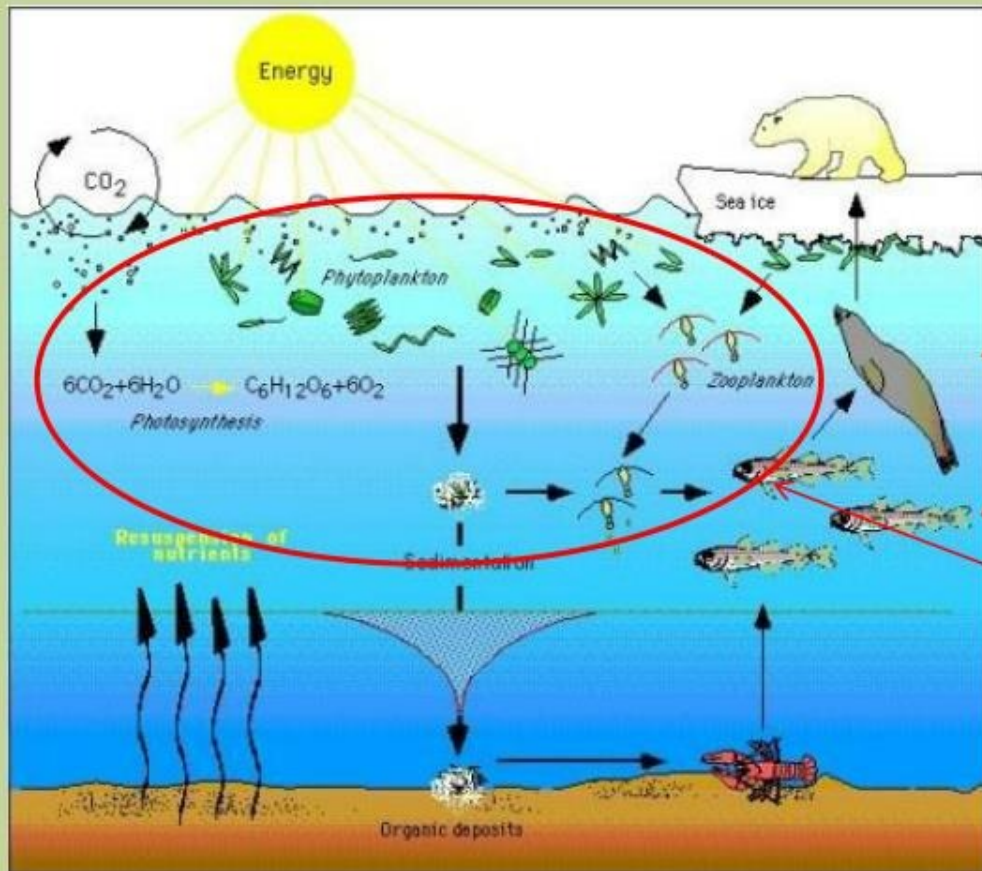
Natural Arctic Ocean

- Many species that live in the Arctic Ocean environment are unique and can't be found anywhere else in the world.
- The arctic is high in oxygen.
- Many known resources are not exploited because of their inaccessibility.
- The arctic region of Russia, the most developed of all the arctic regions.





Arctic Food Web



Upper trophic levels

Plankton

Drawn by Christopher Krembs

Artificial Arctic

- A more sustainable environment in the Arctic.
- Drifting ice and water currents are effecting the ocean.
- Structures like oil rigs potentially having a impact on the natural environment.

“We have to think about using some... constructions, instead of blocks of drifting ice as platforms,” **Alexander Frolov** said.



ARCTIC OIL BONANZA

Twenty-five percent of the world's reserves could lie buried under these areas.



Assessed Arctic Provinces

1. North Slope
2. East Siberia
3. West Siberia
4. Timan-Pechora
5. South/North Barents
6. Vestford Helgeland
7. East Greenland

Potential Arctic Provinces

8. Vilkitsky
9. Laptev Sea
10. Vilyuy
11. Khatanga
12. North Kara Sea
13. West Barents
14. West Greenland
15. Sverdrup
16. Beaufort-Mackenzie