

index.html

Information about living organisms



Inventions

Extinct Species

Conservation projects

Shipwrecks

Conservation Ideas

The scientific study of classifying organisms is called taxonomy. The classification system is based on shared characteristics and is used to understand the evolutionary history and relationships between organisms.

The main ranks in the modern classification system are:

Domain: The three domains are Bacteria, Archaea, and Eukarya

Kingdom: The five kingdoms are Animalia, Plantae, Fungi, Protista, and Monera

Phylum: For example, Chordata is the phylum that includes humans

Class: For example, Mammalia is the class that includes humans

Order: For example, Primates is the order that includes humans

Family: For example, Hominidae is the family that includes humans

Genus: For example, Homo is the genus that includes humans

Species: The specific name of an organism

The Swedish botanist Carl Linnaeus is considered the founder of the modern classification system. He developed the Linnaean system of taxonomy and binomial nomenclature for naming organisms.

Animals can also be divided according to their habitat as per Aristotle. Aristotle, a Greek scientist, was one of the first to classify living things. His classification system divided organisms into two main groups: plants and animals.

He further classified these groups based on various characteristics, including:

- Habitat**
Aristotle divided organisms into three groups based on where they lived: terrestrial (land), aquatic (water), and aerial (air).
- Morphology**
Aristotle classified plants into herbs, shrubs, and trees based on their morphological features, such as height and girth.
- Presence of RBCs**
Aristotle classified animals into two groups based on whether they had red blood cells (RBCs): enaima (with RBCs) and anaima (without RBCs).
- Soft-shelled or hard-shelled**
Aristotle divided animals without blood into soft-shelled Malakostraka (crabs, lobsters, and shrimps), and hard-shelled Ostrakoderma (gastropods and bivalves).

He also divided soft-bodied animals into Malakia (cephalopods) and divisible animals into Entoma (insects, spiders, scorpions, ticks).

Aristotle is known as the "Father of Biology".
Linnaeus is known as the 'Father of Taxonomy'.

The animals can also be divided based on their habitats as terrestrial, aquatic and aerial.
In these organisms, we will discuss about aquatic animals and related topics.

Learn more about taxonomy. Explore [Wikipedia](#) for more!

Activate Windows
Go to Settings to activate Windows.

Windows taskbar: Type here to search, 29°C, 18:54:42 22-12-2024

inventions.html

Discoveries in Marine


C:\Users\LENOVO\Desktop\Brief%20about%20Marine\inventions.html

Inventions helping in knowing about marine biology

1. Microscope

Discovery: Allowed scientists to see tiny marine organisms like plankton.

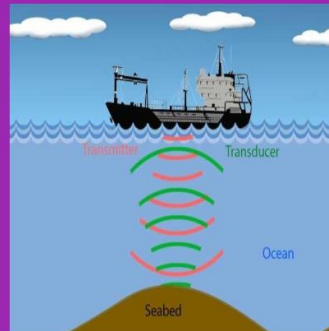
Impact: Enabled the study of microscopic life forms, essential for understanding ecosystems.



2. Sonar

Discovery: Uses sound waves to detect objects underwater.

Impact: Helped map the ocean floor and locate schools of fish, revolutionizing marine exploration.



3. Submersibles

Discovery: Vehicles designed to explore deep-sea environments.

Impact: Provided direct observation and sampling of marine life in extreme conditions.



4. Remote Operated Vehicles (ROVs)

Discovery: Unmanned, remotely controlled underwater robots.

Impact: Allowed scientists to explore deep oceans without risking human lives.



5. Satellite Technology

Discovery: Satellites monitor ocean temperatures, currents, and health.

Impact: Improved understanding of global climate change and marine ecosystems.



6. Aquaculture Techniques

Discovery: Methods for farming fish and shellfish.

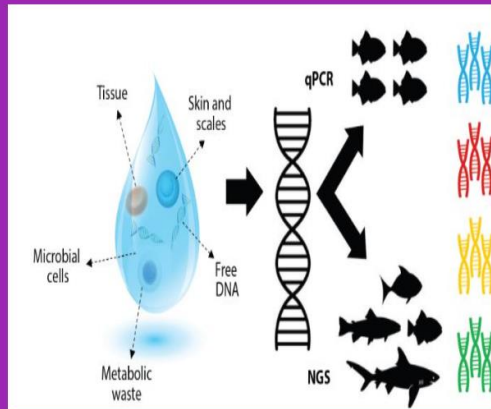
Impact: Helped meet seafood demands sustainably and study aquatic species in controlled environments.



7. DNA Sequencing

Discovery: Analyzing genetic material from marine organisms.

Impact: Enhanced understanding of biodiversity and evolutionary relationships among species.



8. Environmental Monitoring Equipment

Discovery: Tools that measure water quality, temperature, and pollutants.

Impact: Helped track the health of marine ecosystems and the impact of human activity.



These inventions and discoveries have greatly advanced our understanding of marine life, ecosystems, and the health of our oceans!



[GO TO HOME](#)




Activate Windows
Go to Settings to activate Windows.

[Learn more about discoveries. Explore Wikipedia for more!](#)

Activate Windows
Go to Settings to activate Windows.

species.html

Endangered Species					
NOTE:- † symbol indicates that those species are extinct.					
S.No	Picture	Name	Scientific Specifications	Features	Reason
1		Eelgrass limpet	Domain: Eukaryota Kingdom: Animalia Phylum: Mollusca Class: Gastropoda Subclass: Patellogastropoda Family: Lottiidae Genus: Lottia Species: †L. alveus	Eelgrass limpet was a species of sea snail. Until the late 1920s, this species was apparently quite common, and was easy to find at low tide in eelgrass beds, in many sheltered localities on the northeastern seaboard of North America. This small limpet used to live on the blades of Zostera marina, a species of seagrass. Limpets are voracious consumers of algae, and their action prevents algae from building up and using all the available space – a valuable resource on rocky shores.	The eelgrass which is the habitat of eelgrass limpets were effected by "wasting disease" which caused them to extinct.
2		Dugong	Domain: Eukaryota Kingdom: Animalia Phylum: Chordata Class: Mammalia Order: Sirenia Family: Dugongidae Subfamily: Dugonginae Genus: Dugong Species: D. dugon	Dugong is type of sea cow which helps in maintaining seagrass meadows, sequester carbon, protect coastlines from tides, become prey for predators like sharks and killer whales, spread sea grass seeds etc.Dugongs live in warm, shallow coastal waters in the Indian and Pacific Oceans, where they can find seagrass	The dugong has been hunted for thousands of years for its meat and oil. Traditional hunting still has great cultural significance in several countries in its modern range, particularly northern Australia and the Pacific Islands. The dugong's current distribution is fragmented.The IUCN lists the dugong as a species vulnerable to extinction.
3		Ganges river Dolphin	Domain: Eukaryota Kingdom: Animalia Phylum: Chordata Class: Mammalia Order: Artiodactyla Infraorder: Cetacea Family: Platanistidae Genus: Platanista	The Ganges river dolphin is important because it is a reliable indicator of the health of the entire river ecosystem. The government of India declared it the National Aquatic Animal in 2009.	Ganges river Dolphins are endangered due to several reasons like fishing, pollution from industries, construction of dams and barrages which destroy its habitat, climate change, motorized vehicles, sediment deposition, mechanized boat traffic etc.
4		Golden Toad	Domain: Eukaryota Kingdom: Animalia Phylum: Chordata Class: Amphibia Order: Anura Family: Bufonidae Genus: Incilius Species: †I. periglenes	As both a predator and prey, golden toads were an integral part of the food web of the ecosystem they inhabited. With the species now extinct, it will naturally affect the rest of the food web, depriving their predators of a specific food source and risking an overpopulation of local insect prey.	The golden toad was last seen in 1989, and its disappearance was the first extinction to be blamed on human-caused global warming.
5		Pink-headed duck	Domain: Eukaryota Kingdom: Animalia Phylum: Chordata Class: Aves Order: Anseriformes Family: Anatidae Genus: Rhodonessa Species: R. caryophyllacea	These species help in fresh water ecosystem contribution, seed dispersal, nutrient cycling and indicator species.	Pink-headed duck were extincted because of habitat loss and hunting. IUNC declared these species as Critically Endangered.
			Domain: Eukaryota Kingdom: Animalia Phylum: Chordata		

	6		Hammerhead shark	Class: Chondrichthyes Subclass: Elasmobranchii Order: Carcharhiniformes Family: Sphyrnidae Genus: Sphyrna Species: S. mokarran	Hammerhead sharks play a vital role in marine ecosystem by acting as a top predator eating sick and injured creatures, stabilizing fish stock and ensuring diversity.	Hammerhead sharks are getting extinct due to hunting, overfishing, beach protection programs etc. IUNC declared these species as Critically Endangered.	
	7		Sawfish	Domain: Eukaryota Kingdom: Animalia Phylum: Chordata Class: Chondrichthyes Subclass: Elasmobranchii Order: Rhinopristiformes Family: Pristidae	Sawfishes act as top carnivore which maintain balance in ecosystem, help in nutrient cycling, habitat enhancement, indicate the health of the ocean by culling out sick or injured prey. They are considered as symbols of strength, spirituality, and admiration.	Sawfishes are near to extinction due to illegal hunting, fishing nets(as these species easily get caught in nets) and habitat destruction(mangrove forests) IUNC declared these species are Threatened Species.	
	8		Guitarfish	Domain: Eukaryota Kingdom: Animalia Phylum: Chordata Class: Chondrichthyes Subclass: Elasmobranchii Order: Rhinopristiformes Family: Rhinobatidae	Guitarfish play a vital role in the marine ecosystem as predators and prey, helping to maintain balance within their habitats.	Some species of guitarfish are threatened or endangered due to commercial and subsistence fishing. Their low reproductive rates, low growth, late maturity are other reasons. The IUCN lists 23 species of guitarfish as Endangered and 10 as Critically Endangered.	
	9		Giant clams	Domain: Eukaryota Kingdom: Animalia Phylum: Mollusca Class: Bivalvia Order: Cardiida Family: Tridacnidae Genus: Tridacna Species: T. gigas	Giant clams act as food source, shellers, modify habitats, help in filtering water, Zooxanthellae reservoirs, produce calcium carbonate which help in reef frameworks.	Giant clams are facing important threats from coral reef degradation and destruction, harvesting by coastal and island communities, and the sale and export of wild and dead specimens for the illegal aquarium trade and ornamental shell trade. IUNC declared these species in vulnerable category.	
			Indian narrow-headed softshell turtle	Domain: Eukaryota Kingdom: Animalia Phylum: Chordata Class: Reptilia Order: Testudines Suborder: Cryptodira	Spiny softshell turtles are important to the ecosystem because of their role as predators. Because they prey on crustaceans and aquatic insects as well as fish, they help keep these population under control in their habitat.	Indian narrow-headed softshell turtle are extinct due to damming of rivers, destruction of wetlands, overfishing, pollution, and hunting, both for its meat and eggs. IUNC declared these species in Endangered category.	
				Genus: Chitra Species: C. indica	according to Animal Diversity Web		
GO TO HOME							Activate Windows Go to Settings to activate Windows.

conservation_projects.html

Conservation of Marine Species



The Indian government has several projects to conserve marine species, including:

- National Marine Turtle Action Plan:** Conserves marine turtles and their habitats
- Project Dolphin :** Monitors and conserves marine dolphins
- Endangered Species Recovery program:** Monitors and recovers populations of marine invertebrates and other species
- Coastal Regulation Zone (CRZ) Notification, 2019:** Focuses on conservation and management plans for ecologically sensitive areas (ESAs)
- Marine Living Resources (MLR) program:** Includes a societal services component to support fisher folks in Lakshadweep Islands
- Pradhan Mantri Matsya Sampada Yojana (PMMSY):** Encourages sustainable marine fisheries activities
- UNDP Sea Turtle Project:** Conserves Olive Ridley Turtles in 10 coastal states, including Odisha
- The government also provides financial assistance to maritime states for the conservation of corals and mangroves.

Here are some acts and initiatives that the Government of India has implemented to conserve marine species:

- The Wild Life (Protection) Act, 1972 :** Provides legal protection to many marine animals and regulates trade in them. The act also allows the establishment of protected areas where human activities are restricted.
- The Environment (Protection) Act, 1986 :** Along with other acts, this act is responsible for conserving the coastal and marine environment.
- The Coastal Regulation Zone (CRZ) Notification, 2019 :** This notification focuses on the conservation and management of ecologically sensitive areas like mangroves, coral reefs, and turtle nesting grounds. It prohibits developmental activities and waste disposal in these areas.
- The Maritime Zones of India Act, 1976 :** This act allows the government to take measures to protect the marine environment.
- The Coast Guard Act, 1978 :** This act states that the Indian Coast Guard is responsible for preserving and protecting the marine environment and controlling marine pollution.
- National Biodiversity Act, 2002 :** This act is responsible for conserving the coastal and marine environment.

shipwrecks.html

1. Definition
A **shipwreck** occurs when a ship sinks or is destroyed due to an accident, storm, or other causes.

1. Definition
A **shipwreck** occurs when a ship sinks or is destroyed due to an accident, storm, or other causes.

2. Causes

- Bad weather (storms, hurricanes)
- Collisions with other ships or objects (rocks, icebergs)
- Human error or poor navigation
- Mechanical failure
- War or sabotage

2. Causes

- Bad weather (storms, hurricanes)
- Collisions with other ships or objects (rocks, icebergs)
- Human error or poor navigation
- Mechanical failure
- War or sabotage

2. Causes

- Bad weather (storms, hurricanes)
- Collisions with other ships or objects (rocks, icebergs)
- Human error or poor navigation
- Mechanical failure
- War or sabotage

2. Causes

- Bad weather (storms, hurricanes)
- Collisions with other ships or objects (rocks, icebergs)
- Human error or poor navigation
- Mechanical failure
- War or sabotage

2. Causes

- Bad weather (storms, hurricanes)
- Collisions with other ships or objects (rocks, icebergs)
- Human error or poor navigation
- Mechanical failure
- War or sabotage

2. Causes

- Bad weather (storms, hurricanes)
- Collisions with other ships or objects (rocks, icebergs)
- Human error or poor navigation
- Mechanical failure
- War or sabotage

3. Famous Shipwrecks

- The Titanic (1912) sank after hitting an iceberg.
- The Lusitania (1915) was torpedoed during World War I.
- The Edmund Fitzgerald (1975) sank in a storm on the Great Lakes.

3. Famous Shipwrecks

- The Titanic (1912) sank after hitting an iceberg.
- The Lusitania (1915) was torpedoed during World War I.
- The Edmund Fitzgerald (1975) sank in a storm on the Great Lakes.

3. Famous Shipwrecks

- The Titanic (1912) sank after hitting an iceberg.
- The Lusitania (1915) was torpedoed during World War I.
- The Edmund Fitzgerald (1975) sank in a storm on the Great Lakes.

3. Famous Shipwrecks

- The Titanic (1912) sank after hitting an iceberg.
- The Lusitania (1915) was torpedoed during World War I.
- The Edmund Fitzgerald (1975) sank in a storm on the Great Lakes.

4. Consequences

Shipwrecks can lead to loss of life, damage to the environment (especially oil spills), and the loss of valuable cargo.

4. Consequences

Shipwrecks can lead to loss of life, damage to the environment (especially oil spills), and the loss of valuable cargo.

5. Survivors

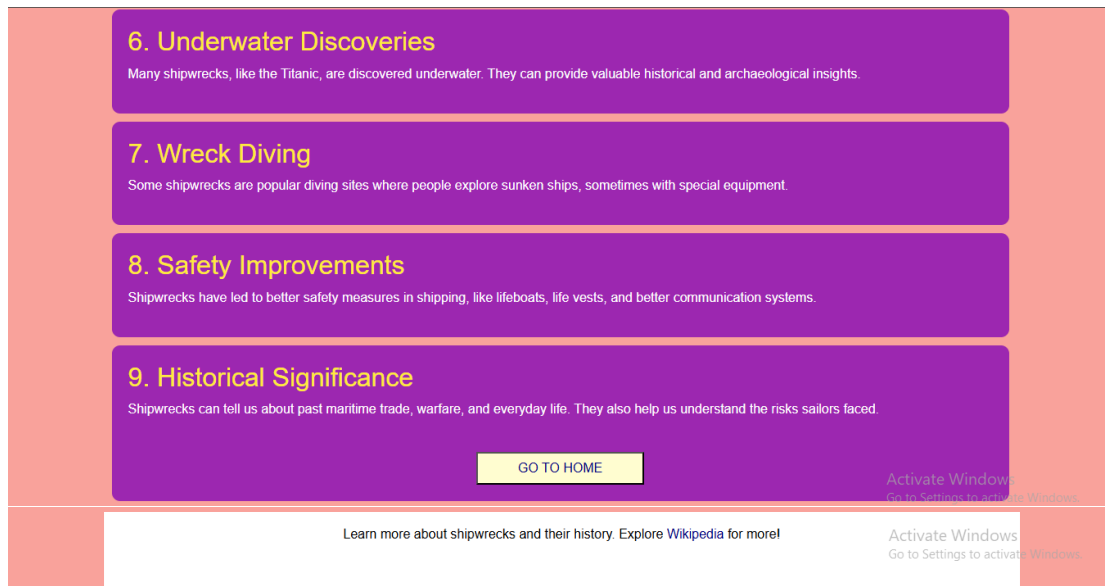
Some shipwrecks have survivors who are rescued, often after days at sea. The survival depends on factors like weather, location, and available rescue efforts.

5. Survivors

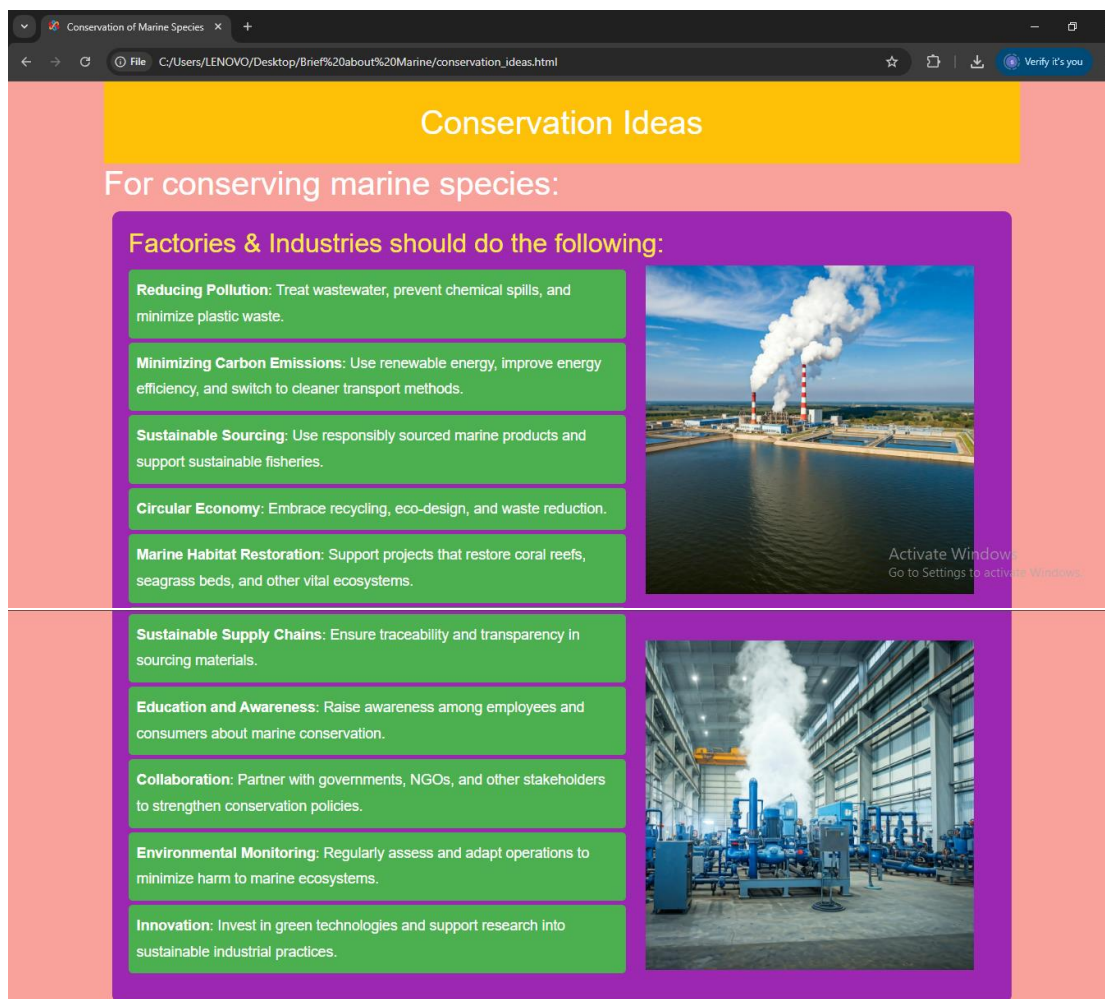
Some shipwrecks have survivors who are rescued, often after days at sea. The survival depends on factors like weather, location, and available rescue efforts.

5. Survivors

Some shipwrecks have survivors who are rescued, often after days at sea. The survival depends on factors like weather, location, and available rescue efforts.



conservation_ideas.html



Hospitals should do the following:

Pharmaceutical Waste Management: Proper disposal of medications and minimizing unnecessary prescriptions to prevent contamination of water systems.

Reducing Plastic Use: Decreasing single-use plastics and implementing recycling programs to reduce waste entering the ocean.

Wastewater Management: Investing in advanced treatment systems and using eco-friendly cleaning products to prevent harmful chemicals from polluting water.

Reducing Carbon Footprint: Improving energy efficiency, using renewable energy, and promoting sustainable transport options.

Supporting Marine Conservation: Partnering with or donating to marine conservation initiatives and raising awareness among staff and patients.



Activate Windows

Sustainable Food Sourcing: Serving sustainably sourced seafood and locally grown, organic food to minimize environmental impact.

Green Building and Operations: Constructing energy-efficient buildings, conserving water, and using eco-friendly materials.

Research and Innovation: Supporting research on environmental health and investing in green technologies.

Promoting a Green Culture: Educating staff and patients on sustainable practices and marine conservation.

Monitoring and Reporting: Regularly assessing environmental impact and being transparent about sustainability efforts.



Common Man should do the following:

Reduce Plastic Use: Avoid single-use plastics, recycle properly, and choose eco-friendly alternatives.

Minimize Water Pollution: Properly dispose of chemicals and use natural fertilizers to prevent contamination of waterways.

Conserve Water: Use water-saving practices like fixing leaks and collecting rainwater.

Support Sustainable Seafood: Buy sustainably sourced fish and avoid endangered species.

Reduce Carbon Footprint: Use public transport, adopt renewable energy, and conserve energy at home.

Participate in Beach Cleanups: Volunteer for local cleanups and raise awareness about marine pollution.



Activate Windows

Go to Settings to activate Windows.

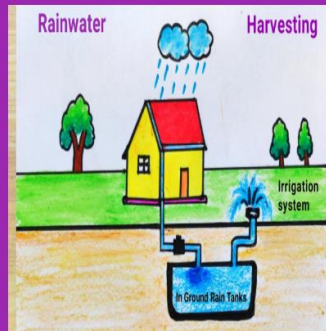
Support Environmental Causes: Donate to marine conservation organizations and advocate for protective policies.

Be Mindful of Consumption: Buy less, choose sustainable products, and recycle.

Educate Yourself and Others: Learn about marine issues and spread awareness.

Support Eco-Friendly Brands: Choose companies that prioritize sustainability.

Reduce Meat Consumption: Eating less meat helps reduce environmental strain on ecosystems.



GO TO HOME

Activate Windows
Go to Settings to activate Windows.