

Descriptions of Marine animals

Food web to build: **polar seas**

1.Squid: feeds on small fish and crustaceans (like crabs and shrimps)- in all regions of the globe

2.Copepod (zooplankton): related to shrimps (crustacean)- feeds on phytoplankton-in all regions of the globe

3.Dinoflagelates (phytoplankton): occurs in all regions of

the globe- the second most abundant type of phytoplankton- about half of the species are autotrophes

4.Elephant seal: a marine mammal that lives in sub-polar to temperate regions, including California- feeds on fish-they are record-breaking divers

5.Grouper: occur only in sub-tropical and tropical regions, generally associated with coral reefs- they are important predators that keep in check grazers- overfishing of groupers leads to a decrease in the health of coral reefs as grazing increases

6.Manta ray: the largest of the rays- lives in tropics and sub-tropics- feeds on plankton- only large predators such as sharks can eat an adult manta ray

7.Reef shark: in sub-tropical and tropical regions- feeds mainly on fish- plays a very important role in "taking out" the wounded or older preys: it keeps the fish populations healthy

8.Harlequin shrimp: a crustacean that lives on coral reefs- one of the few predators of the crown-of-thorn starfish

9.Parrot fish: occurs only in sub-tropical and tropical regions, on coral reefs- they graze on "coralline algae", which live together with the coral polyps

10.Coral reef: occur only in sub-tropical and tropical regions- composed of millions of tiny animals called "polyps" that live together in "colonies"- they produce a hard limestone shell that remains once the polyp has died- corals are suspension feeders and receives food that is produced by an algae ("coralline algae") that lives with it ("symbiosis").

11.Damselfish: small fish that lives on coral reefs- feeds on small crustaceans, plankton and algae

12.Crown-of-thorn starfish: an important predator of corals- pollution has caused these animals to become abundant, and therewith destroy large areas of coral reefs- it has a few predators: the Napoleon wrasse, Triton's trumpet and the Harlequin shrimp

13.Sponge: sponges are sessile filter feeders- they occur in all regions but are most abundant on coral reefs

14.Hawksbill sea turtle: occurs only in sub-tropical and tropical regions, generally on coral reefs- feeds on sponges, one of the only animals that can digest the sponge's "spicules" that are made of silica (glass!)

15.Leatherback sea turtle: in sub-polar to tropical regions- feeds mainly on jellyfish

16.Diatoms (phytoplankton): occurs in all regions of the globe- the most abundant type of phytoplankton- autotrophe

17.Giant triton: a mollusk that occurs in tropical waters, on coral reefs- feeds on other mollusks and the Crown-of-Thorn starfish

18.Napoleon wrasse: a large predatory fish of coral reefs- is being overfished- one of the few predators of the crown-of-thorn starfish but feeds also on other fish species, including groupers and parrot fishes.

19.Ringed seal: in polar waters (Northern Hemisphere)- feeds on fish

20.Beluga whale: in polar waters (Northern Hemisphere)- feeds on fish

21.Kelp forest: in sub-polar to temperate regions of the globe- Important ecosystem for many species of fish

22.Cuttlefish: occurs in all regions of the globe- feeds on small fish and crustaceans- a very important source of food for toothed whales (spermwhales), tuna, dolphins and humans

23.Sea lion: a marine mammal- in sub-polar to temperate regions, including California- feeds on fish and even other mammals such as sea otters

24.Sea otter: lives in sub-polar to temperate regions, including California- feeds on sea urchins, mollusks (abalone, mussels etc.)- Is the only marine mammal that uses "tools" like stones to break open hard shells- important for the maintenance of Kelp forests

25.Polar bear: the largest land-carnivore- in polar regions of the Northern Hemisphere (Russia, Canada, Alaska)- feeds mainly on seals, and sometimes on Beluga whales

26.Fur seal: in Polar Regions of the Northern Hemisphere- feeds on fish

27.Starfish: in all regions of the globe- feeds on urchins

- 28.Salmon:** feeds on small fish- in sub-polar to temperate regions of the globe- reproduces in rivers but lives in the ocean
- 29.Mussels:** sessile suspension feeders (filter sea water and retain little food items)- in all regions of the globe
- 30.Crab:** in all regions of the globe- detritivore (feeds off animal and plant debris)
- 31.Marine bacteria:** important decomposers (turn organic matter into inorganic matter)- in all regions of the globe
- 32.Sea urchin:** a benthic (lives on the sea bottom) invertebrate- feeds on algae such as kelp- present in all regions of the globe.
- 33.Jellyfish:** feed on small fish, crustaceans such as krill etc.- in all regions of the globe
- 34.Industrial-scale fishing (tuna boat):** in all oceans of the world
- 35.Isopod:** occurs in all regions of the globe- a parasite of mainly fish
- 36.Industrial-scale fishing (shrimp trawler):** in all oceans of the world
- 37.Baleen whale:** marine mammal- in all regions of the globe- uses its rows of “baleen” to filter great amount of water or mud (grey whale) it traps in its mouth- krill and other small prey (crustaceans and fish) are sieved out by the baleen
- 38.Orca or Killer whale:** marine mammal- in all regions of the globe- the king of the Sea, if hungry, it preys on any (big) animal it comes across, except humans- they can kill large sperm whales and even great white sharks- its only enemy: Man
- 39.Skua:** sea bird- feeds on fish it robs from other birds through “hassling”- in sub-polar to temperate regions of the globe
- 40.Inuit:** the original human inhabitants of the North Polar regions- they fish and hunt big animals like whales, seals and Polar bears
- 41.Albatross:** one of the largest birds. Spends almost its entire life flying. It is a “soarer”: so it depends on winds. Therefore it occurs in sub-polar to temperate regions of the globe- feeds on fish and crustaceans
- 42.Penguin:** a sea bird that can't fly. It's wings have evolved into flippers- feeds mainly on fish- occurs in the sub-polar and polar regions of the Southern Hemisphere
- 43.Pelican:** in sub-polar to warm regions of the globe, but prefers the tropics- Feeds mainly on fish
- 44.Dolphin:** extremely intelligent marine mammal- in all regions of the globe- feeds on fish which it locates using its natural “sonar” (echolocation)- gets caught in Tuna nets
- 45.Tuna:** in all regions of the globe- feeds on fish- some species can grow to great sizes (bluefin: 1496 pounds)- some populations are almost extinct due to overfishing: avoid eating tuna (no tuna Sushi!)
- 46.Great white shark:** a top predator and direct descendant of the prehistoric “Charcharodon megalodon” megatooth shark- in all regions of the globe but prefers temperate to cold waters (like California) as it has more of its favodrite prey: seals.
- 47.Herring:** small fish of 6-18 inches- in all regions of the globe, but more abundant in cold seas- important prey species for many predatory fish (tuna) and marine mammals and birds- feeds on zooplankton.
- 48.Octopus:** feeds on other mollusks, small fish and crustaceans- in all regions of the globe
- 49.Sardine:** small fish of 6-18 inches- in all regions of the globe, but more abundant in cold seas- important prey species for many predatory fish (tuna) and marine mammals and birds- feeds on zooplankton
- 50.Krill:** one of the most abundant animals on earth (all the Antarctic krill weighs twice the weight of all humans together!)- most abundant in polar and sub-polar waters but present in all regions of the globe- at the second trophic level of the Antarctic marine ecosystem- feeds on phytoplankton and also on zooplankton- measures 0.5 to 6 inches
- 51.Sailfish:** a fast predator- occurs in temperate to tropical regions of the globe- feeds on fish such as sardine, herring, and even small tuna
- 52.Spiny lobster:** occurs in the tropics, on coral reefs- detritivore.