

Resources from the Sea

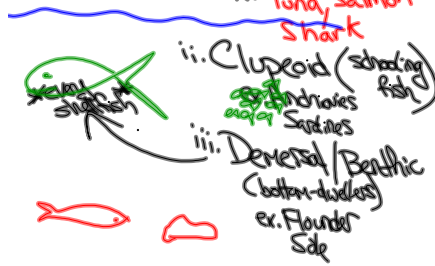
I. Food

a) of all the food that is consumed by people, only 1% comes from the ocean.

b) 80-85% → Finfish (ex. Shark, Cod)
 10-15% → Shellfish (ex. Clam, Crab, Lobster, Tuna, shrimp)
 1% → other (jellies, hares, sea urchin)

c) Finfish

i. Pelagic (open-ocean)
 ex. Tuna, Salmon, Shark



ii. Clupeoid (schooling fish)
 ex. Anchovies, Sardines

d) Methods of catching fish

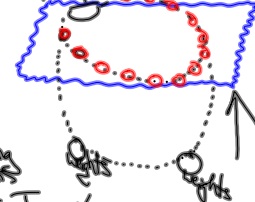
i. Long-lining ↔ Pelagic
 ii. Purse-seining ↔ Clupeoid
 iii. Trawling ↔ Demersal/Benthic

e) Definitions/Diagrams

i. Long-lining
 a single "long" fishing line is floated in the ocean attached to multiple "floats" @ each float is hook(s) with bait

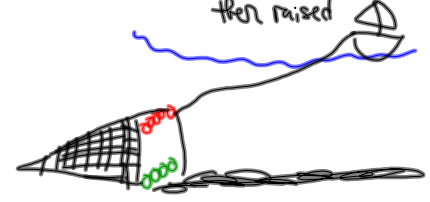


ii. Purse-seining
 a circular net is dropped in the water, surrounding a school of fish, then pulled shut @ the bottom + raised up out of the water



* = clearing from floats

iii. Trawling
 - a net is dropped to the bottom of the sea floor + dragged/pulled by a boat @ the surface then raised



II. Conserving Fish Populations

a) Improve efficiency of fishing techniques to lessen "by-catch"

b) Regulations/Laws

- Maximum Sustainable Yield/Catch
↳ the most "fish" that can be caught w/out harming the population

c) Fish Farming

- artificial growth and care of "stock" fish in contained areas (pens)

III. Fish-farming

* Aquaculture

a) Def \Rightarrow artificial selection, reproduction, growth of various fish species specifically for human consumption

b) "PEN" \rightarrow area in which the fish live

c) Pro's (+)	Con's (-)
Don't hurt "stock" population. "wild" Easier access to fish Grow more fish Make more food	Easily spread infection/disease Water is easily contaminated in the pens Quality of fish meat \downarrow Fish eat things not in their natural diet Damage nearby ecosystems Limited # of fish species can be farmed

III. Shellfish

a) make up about $\sim 14\%$ of food from the sea

b) Includes

Lobsters, shrimps, crabs, mussels, clams, scallops, oysters, octopus + squid

c) Lobsters + crabs \rightarrow traps/pots

shrimps \rightarrow trawls

clams, scallops, mussels, oysters \rightarrow dredge