Chapter 23

Natural resources – materials obtained directly from the environment

Renewable resources – can reproduce and replenish their populations

Nonrenewable resources – available in a limited quantity

Conservation – responsible management and protection of natural resources

Fisheries industry – harvest fish and shellfish for commercial value
- people eat about 2/3 of the seafood caught and sold
- the other 1/3 is used for domestic feed and other products
- about 30 species account most of the fish intentionally caught

1950-1990, the world's fishing fleets harvested increasingly larger amounts of fish

In 1950 the world seafood was around 20 million metric tons (mmt),
in 2000 that number was 95 mmt

Marine Fishing Methods
- there are 2 basic methods:
  1. hooks and lines: with rod + reel, by hand, or long-lining
  2. variety of nets: traveling net, purse seine net, or gill net (see diagram)
- **By-catch** – unwanted marine species caught in nets. They are considered not commercially valuable (or not legal) and simply discarded, normally dead or dying
- Recently there's about 30 mmt of marine by-catch

Limits on Commercial fishing
- Fish need time to increase their population or stock
- The federal government uses conservation measures to increase the stock of valuable fish
- These measures can be:
  - size requirements
  - seasons – times of the year
  - Quotas- number of fish (or lbs.) taken
  - Restricting **fishing zones** for protecting critical habitats
  - moratorium – a delay or suspension of fishing (usually a specific species)
  - method in which fish are caught

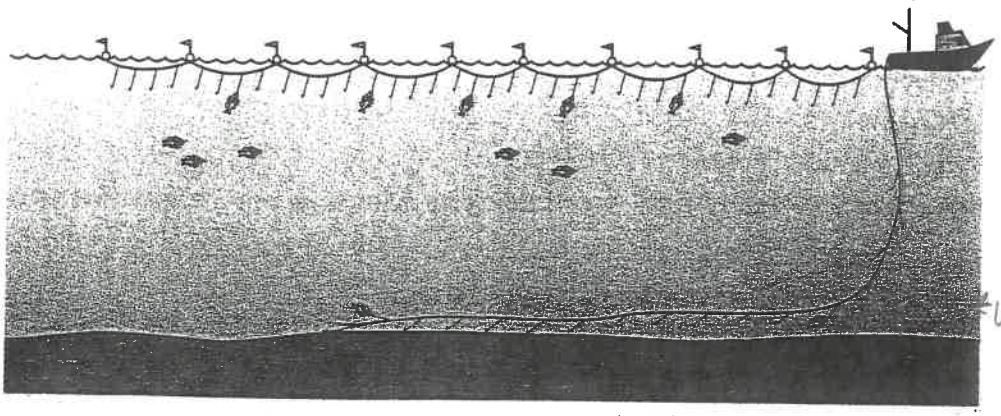
One important consideration is determining a reasonable harvest size.

Maximum Sustainable Yield- the largest number of fish that can be taken from a population without threatening the future stock
- About 3/4 of ocean fish are being over-harvested

Chapter 25

Marine Fishing methods

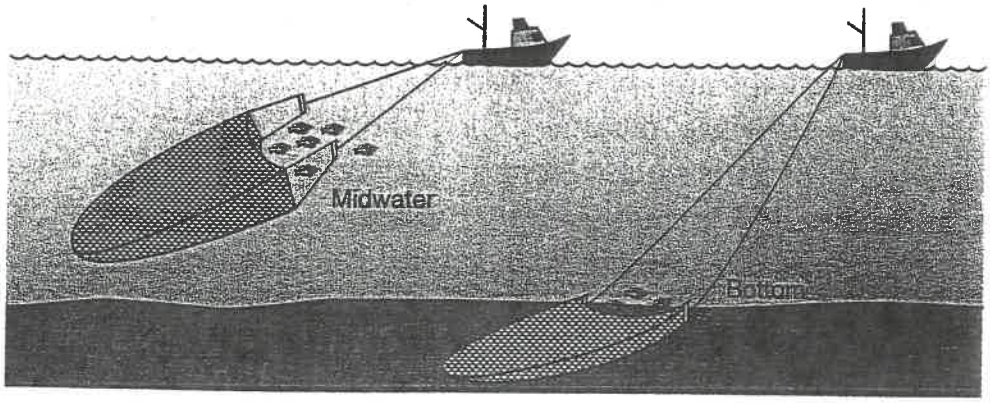
① long lining



hundreds of hooks

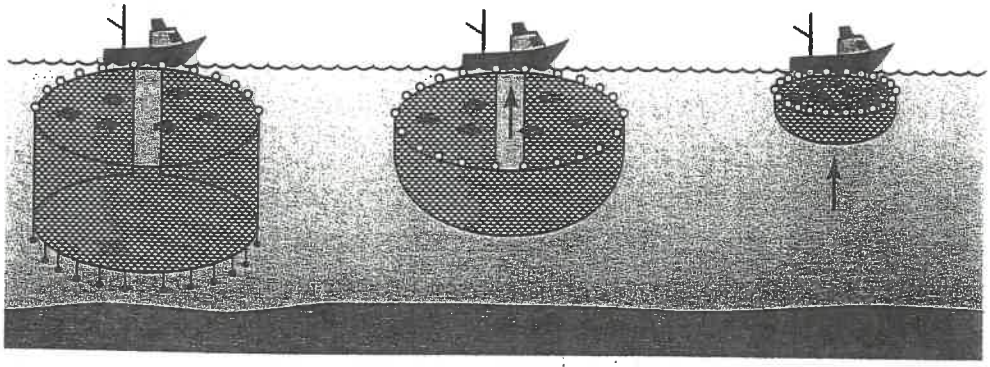
weights

② trawling net



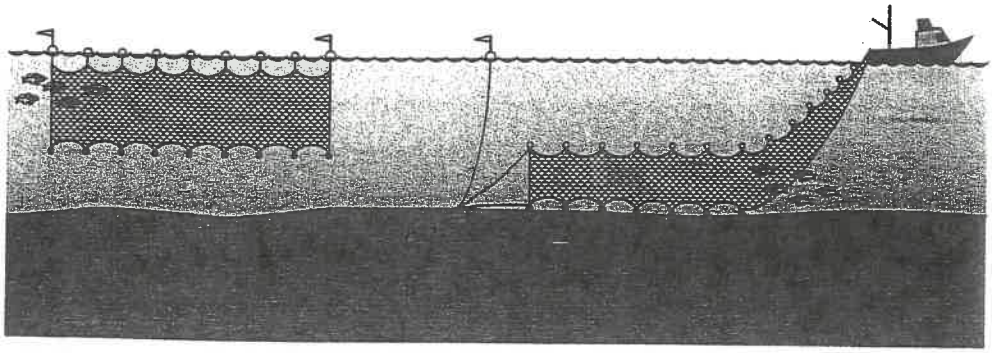
drag net then wench it up

③ purse seine net



ex: salmon

④ gill net



near surface or at bottom

different size holes in net to trap fish

most determental