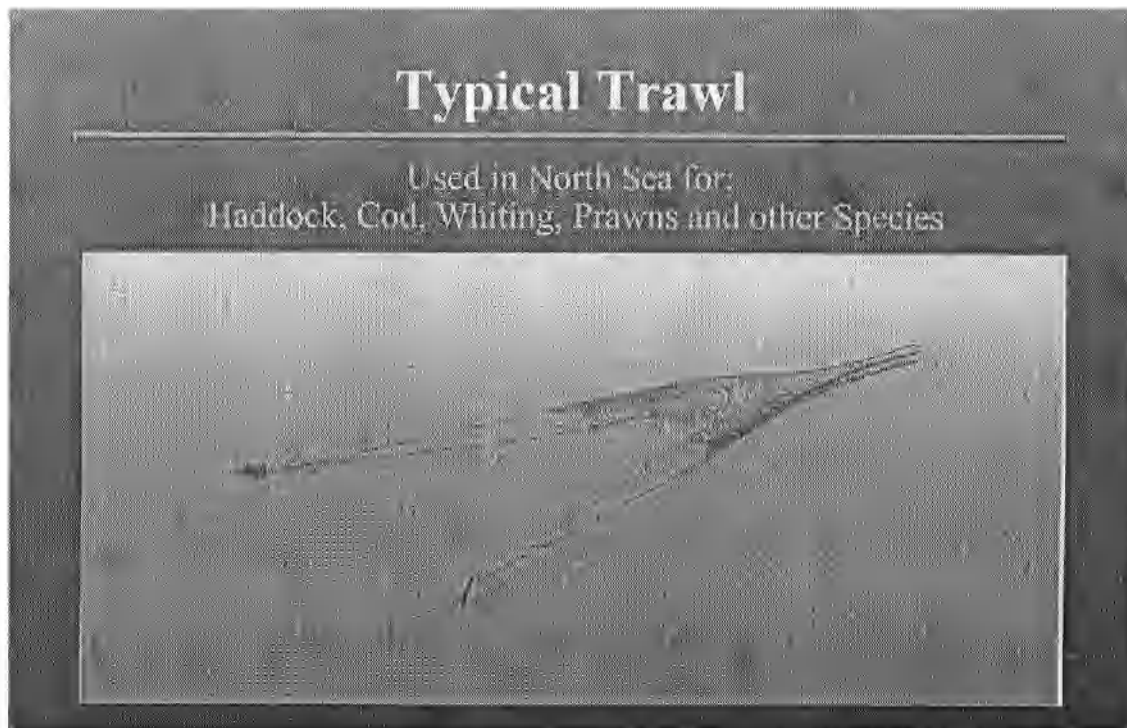


DISCARDS AND BY-CATCH IN TRAWL FISHERIES

By

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Trawls are Unselective

Use one minimum mesh size to select several species

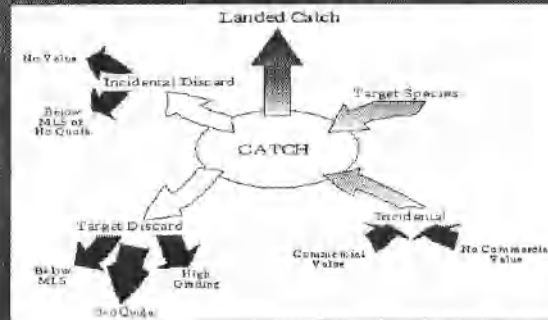
- Poor size selectivity
- Poor species selectivity

Each species has a specific minimum landing size

- Haddock - 30 cm
- Whiting - 27 cm
- Cod - 35 cm

Definitions:

- Discards - the portion of the catch returned to the sea as a result of economic, personal or legal considerations
- By-Catch - Incidental Catch



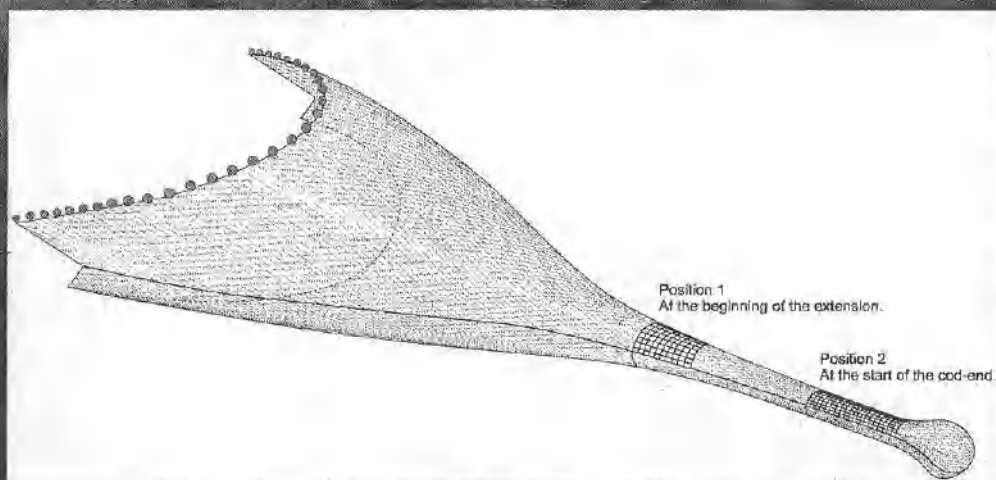
Discard Rates

- Haddock typically 40% by number/year
- Whiting typically 50% by number/year
- Information on other species limited

Species Selectivity May be Improved by:

- Use of separator trawls
- Selection grids
- Square mesh and escape panels

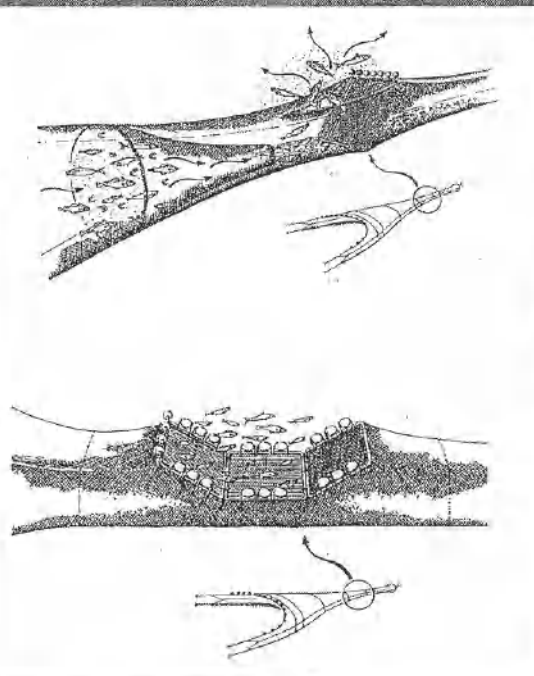
Square Mesh Panels



Selection Grids

- Nordmore
Grid (species
selectivity)

- Sort -X Grid
(size
selectivity)



Size Selectivity May be Improved by:

- Increasing mesh size
- Altering mesh geometry
- Reducing twine thickness

Emphasis of Benefits (or the proverbial carrot)

- Improved catch quality - higher prices?
- Access to fisheries
- Potential increase in future catches?
- Price elasticity - initial revenue loss reduced?
- Greening of the industry

International Use of Selectivity Devices (Usage Encouraged by:)

- Discard plans
- Management harvesting plans
- Trade embargo
- Endangered species legislation
- Access rights

Commercial Acceptance (or Industrial Reluctance)

- No perceived benefits to individual operators
- Increased costs - more expensive gear
- Gear rigging complexities - less efficient gear
- Handling problems - reduced fishing time
- Reduction in marketable catch - loss of revenue

No incentive to use - All cost time and money

Enforcement (or the proverbial stick)

- Most simple measures are abided by, however:
- Complex measures = complex law and enforcement
- Sea going enforcement is expensive
- Risk of detection is low
- Measures are often nullified by owners

Conclusion

- Discard rates in trawl fisheries are high (27Mt/Year)
- Reductions can be achieved through gear alterations
- Implementation must be supported by relevant management schemes
- Industrial involvement in development is important