



Bord Iascaigh Mhara
Irish Sea Fisheries Board

MANAGEMENT OF LONGLINE FISHERIES — THE GOOD, THE BAD AND THE UGLY!

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OUTLINE

- Longlines - A responsible fishing method?
- Current Management Measures
- Examples of Good and Bad Management
- Management Issues & Mitigation Measures
- Conclusions

LONGLINING – A Responsible Method?

- Dates back to early 1500s
- Criticised by the church in Norway as being too efficient (see Bjordal & Løkkeborg)
- Led to swearing, quarrels, fights & alcohol abuse
- Nowadays 5 - 10 billion hooks per year
- Big upsurge in pelagic longlining since 1992

Longlining – A Responsible Method?

Responsible		Trawl
Size Selecti		+
Species Sel		-
Survival aft		+
Ghost fishin		++
Energy Con		--
Benthic Im		-
Fish Quality		++
Total		2



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Current Management Measures

- Specific Detailed Measures limited
- No mention of longlines in EU reg 850/98 (covers basic technical conservation measures)
- Traditional management by
 - TAC & Quotas
 - Effort
 - Closed Areas e.g. species & coral
 - Seasonal & temporal closures
- Hook limits in some areas
- Restrictions on Autoliners in Norway
- Depth limits in others
- Gear marking
- Lost gear (Norway)
- Seabird mitigation measures

A Good Fishery!

- Pacific Halibut fishery
- IFQs (transition from derby)
- Single gear fishery
- Technical Measures
 - Closed areas
 - Tori lines mandatory
- Monitoring of bycatch by CCTV
- MSC certified fishery



A Bad Fishery!

- Patagonian Toothfish
- Southern Ocean & South America
- Widespread IUU (Illegal, Unreported, Unregulated)
- Illegal catches 5 times legal limits
- Decimated stocks
- High bycatch



And Now the Ugly!

- Bycatch Issues
 - Seabirds
 - Marine Mammals & Reptiles
 - Elasmobranchs
 - VME (Vulnerable Marine Ecosystem) Impacts



SEABIRDS

- Global Issue
- Considered a threat to 22 species (FAO), mostly albatrosses
- Affects 28 legal LL fisheries from 14 different countries
- FAO IPOA adopted 1999
- Mitigation measures used in many fisheries



Seabird Mitigation Measures

- Night-setting longlines
- Tori or bird-scaring devices
- Line-setting devices/Baitcasters
- Weighted lines
- Modifying bait condition (Dyed)
- Offal discard modifications
- Strategic distracting discards

Marine Mammals & Reptiles

- Turtles & cetaceans
- Mainly pelagic longlines
- 200,000 loggerheads & 50,000 leatherback (2000)
- Estimated mortality 20%
- Cetacean bycatch and depredation
- Widespread issue
- Entanglement, hooking (pilot whales) & ingesting of hooks

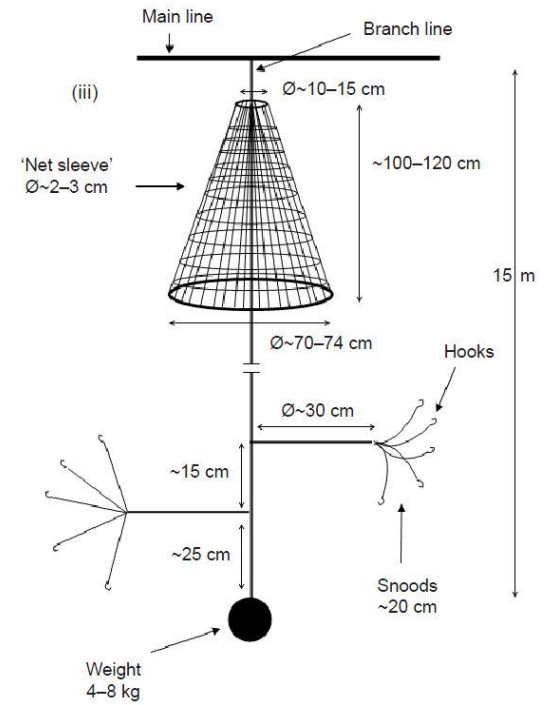


Marine Mammal & Reptile Mitigation Measures

- Turtles
 - Circle Hooks
 - De-hookers
 - Dyed or Novel Baits
 - Setting depth
 - Decreased soak time
 - Glow rope/Flashing lightsticks
- Cetaceans
 - Reflective buoys
 - Modified ropes
 - Galvanic releases
 - Acoustic deterrents & predator sounds
 - Physical depredation mitigation devices – (PDMD) – Net sleeves protect fish while hauling



Circle Hook



Net Sleeves



De-hooker

Elasmobranchs

- Widespread
- Pelagic & demersal longlines
- Bycatch in pelagic gear
- Shark Finning
- Deepwater sharks (Atlantic)

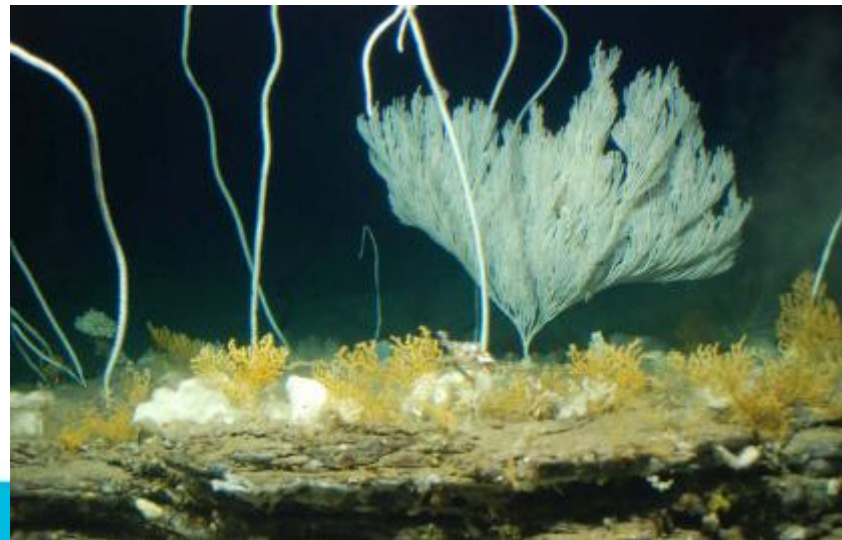


Elasmobranch Mitigation Measures

- Modified bait
- Depth setting
- Electromagnetic deterrents
- Decreased soak time
- Ban on using wire traces
- Ban on fishing
- Time/area avoidance

Vulnerable Marine Ecosystems

- UN Resolution 61/105 – action plan to protect high seas ecosystems
- Significant adverse impacts
- Includes longlines
- International Guidelines for the Management of Deepsea fisheries
- Impact Assessment



Mitigation

- Extensive Closed Areas
- Move out following unexpected encounters
- Requirement for Monitoring & Mitigation plans

Conclusions

- Is it an Environmentally Friendly Gear?
- On balance - Yes!
- Lack of specific management measures
- Candidate Burden of Proof (BOP) Management e.g. Pacific halibut
- Longlines not immune to bad press e.g. pelagic longlines & toothfish
- Issues regarding seabird, marine mammal & elasmobranch bycatch
- Emerging issues with VME's
- Image must be reckoned with