

# Bycatch Management in Fisheries – Impacts and Challenges

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# Presentation Outline

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1. Sustainability Criteria
2. Fisheries Management – Then & Now
3. Bycatch Management & Impacts
4. Definition of a Fisherman – Then & Now
5. Bycatch Management & the Challenge of Change
6. Meeting the Challenge in Pacific Canada
7. Conclusions

# Sustainable Fishing Practices – Three Criteria

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- sustainable harvest of target species & stocks (i.e., fish to a scientifically sound TAC)
- limit impacts on non-target species, habitats & ecosystems (i.e., limit and account for bycatch in TAC setting & catch accounting)
- an effective fisheries management system (inc. catch monitoring)

*...and therefore bycatch management is key*

# Fisheries Management – Then and Now

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## BEFORE/THE PAST

### Circumstances & Philosophy

- fishery open unless closed
- science one of many considerations
- a business approach
- nascent ENGOs, no certification
- TACs - landings only
  - broad species group

### Catch Monitoring Practices

- self-reporting systems - landings only covered
- no at-sea monitoring
- post-season reporting acceptable

VS

## NOW/THE FUTURE

### Circumstances & Philosophy

- fishery closed unless open
- science the main consideration
- a precautionary approach
- strong ENGOs, certification required
- TACs - landings plus discard mortality
  - individual stocks

### Catch Monitoring Practices

- third party systems - landings plus discards
- at-sea monitoring
- in-season reporting required

# Bycatch Management in Practice

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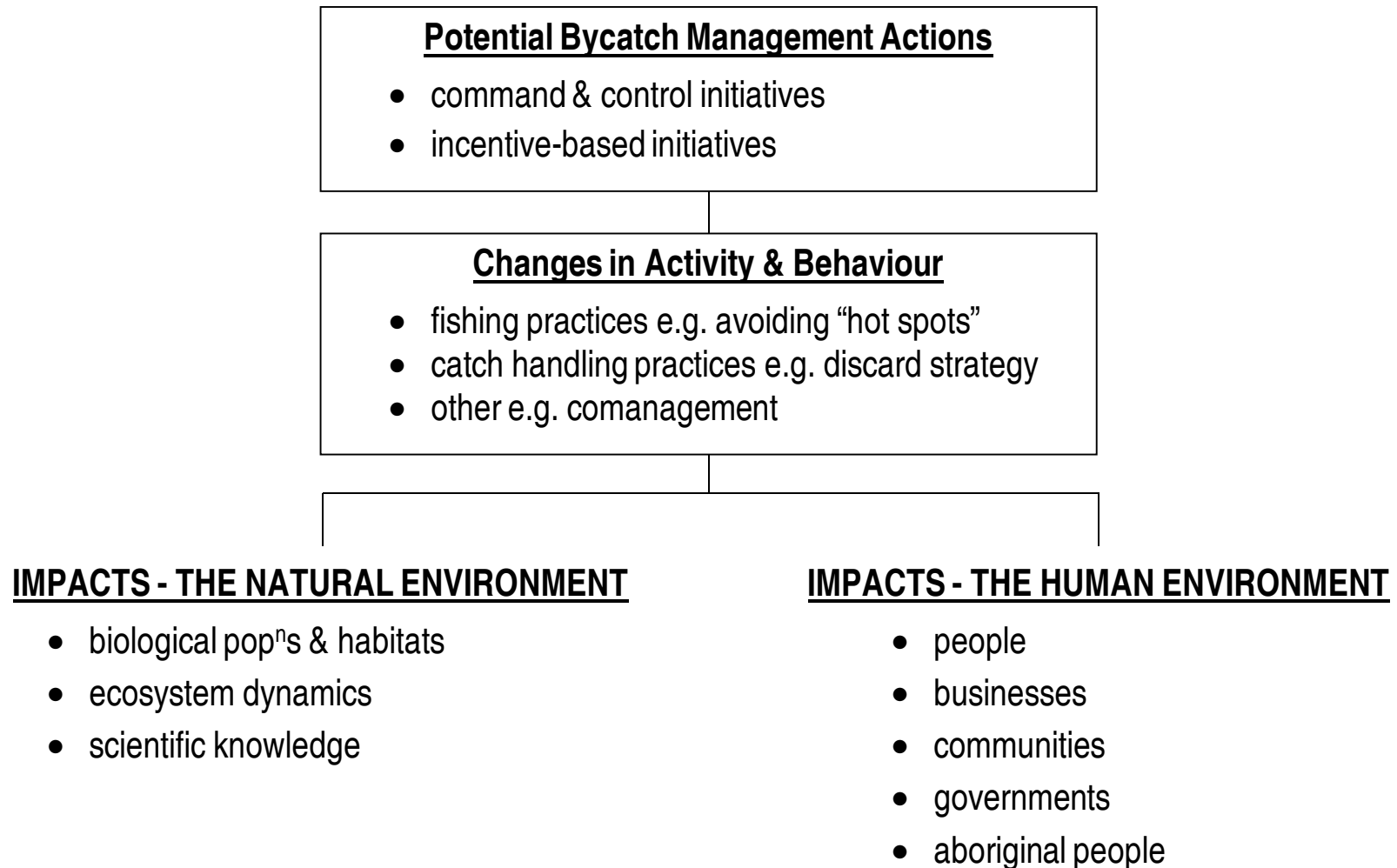
## Measures

- command and control
- incentive-based

## The Importance of At-Sea Monitoring

- needed for bycatch management (of total mortality)
- observers or electronic monitoring (EM)

# Fisheries Bycatch Impact Framework



# Bycatch Management - Socio-Economic Impacts

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## Main Impact: sustaining a viable business model

- sales/quantity
- prices/market access
- costs

## Impact: fisherman skills, attitude & relationships

- some traditional skills devalued e.g. finding fish fast
- some new skills required e.g. avoiding bycatch
- changed behaviour & relationships e.g. comanagement

# One Definition of an Old-Time Fisherman

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"...many of these hard-drinking rogues live on the fringes of society and have chosen to turn their backs on the state and federal politics that will inevitably govern their world. They view life with a kind of proud obstinacy, and as staunch individualists, they care not at all for most politicians and their endless strategies.

these intractable characters look upon them, more or less with contempt, regarding them, one fisherman told me, as 'slightly above a child molester, and well below a horse thief'.

fishermen do what they have always done, and what many believe they were born to do - catch fish. For within the chest of a dyed in the wool fin chaser beats the heart of a hunter. Each day, they arise and begin their satisfying labours, all the while suffering hangovers and enduring liens imposed on them for back child support, and dodging the eviscerating pen of some meticulous IRS accountant, hoping it will all work out, willing to face whatever comes.

They are men and women who refuse to fit in".

Spike Walker, Coming Back Alive – The True Story of the Most Harrowing Search and Rescue Mission Ever Attempted on Alaska's High Seas, St. Martin's 2001.



# One Definition of a Modern Fisherman

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- a person with a business focus who has a long term planning horizon
- a person who works with other members of the seafood value chain to produce the quality, variety and other attributes of seafood that consumers want
- a person with an environmental ethic who sees sustainability in operations as critical to business success & continued access to a public resource
- a person who realizes that greater oversight/monitoring of fishing operations is necessary to meet the sustainability test
- a person who works with rather than against regulatory agencies and regulations & embraces co-management
- a person who embraces lifelong learning in response to challenges and changes in society at large & who is willing to adapt in response to change

# Bycatch Management – Challenges

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**Main Challenge: the human element & change**

# Two Insights on Change

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"...everything needs to change, so everything can stay the same"<sup>1</sup>

"fishermen are slow to change but fast to adapt"<sup>2</sup>

<sup>1</sup> Giuseppe di Lampedusa, *The Leopard*, Collins/Harvell, London 1960.

<sup>2</sup> Bruce Turriss, pers. comm.

# The Pacific Canada Multi-species, Multi-fleet Groundfish Fishery – Lessons Learned re Addressing Bycatch

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1. regulatory authority has to be sincere about the need for change i.e., no idle threats
2. flexible, incentive-driven management is desirable
3. trust-building is essential to problem solving but takes time
4. industry-driven process gives a pragmatic, credible result
5. tackle interconnected problems as a whole i.e., not piecemeal
6. 100% monitoring of total catch for all sectors is needed
7. individual accountability for all catch is key
8. catch shares for all sectors is needed
9. important to instill confidence that all fish caught is being counted
10. leadership from industry & government is critical

# Conclusions

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- sustainability
  - paramount to the modern fishery
  - provides access to economic & social benefits
- public confidence
  - provides social licence to operate in marine environment
  - bycatch management is key to acquiring this social licence
- changed circumstances & changed relationships
  - fishermen & managers
  - leadership required
  - greater cooperation & trust
  - incentive-based management shows promise