



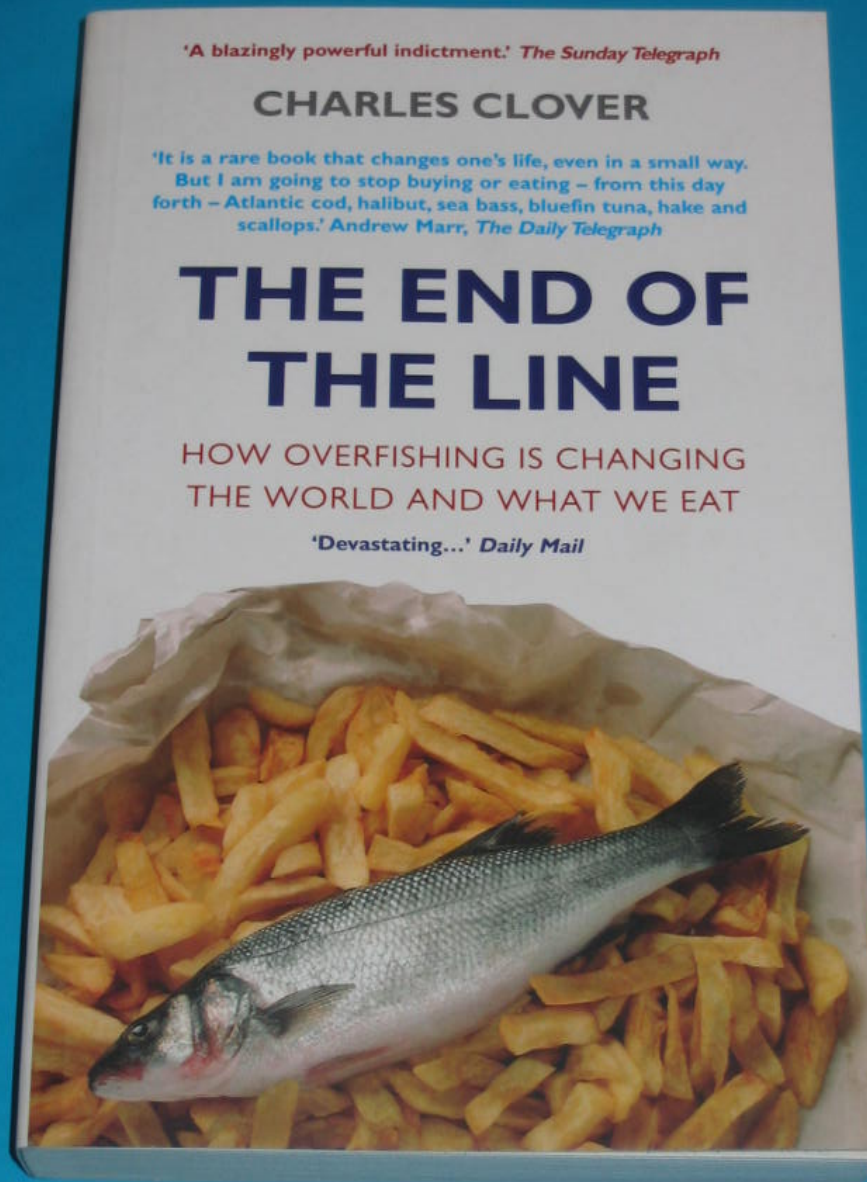
# Environmental Perspectives

Daniel Lee, GAA

# Double in a decade - responsibly

- Aquaculture issues
  - as viewed in popular culture
  - conceptions
  - misconceptions
- BAP program update

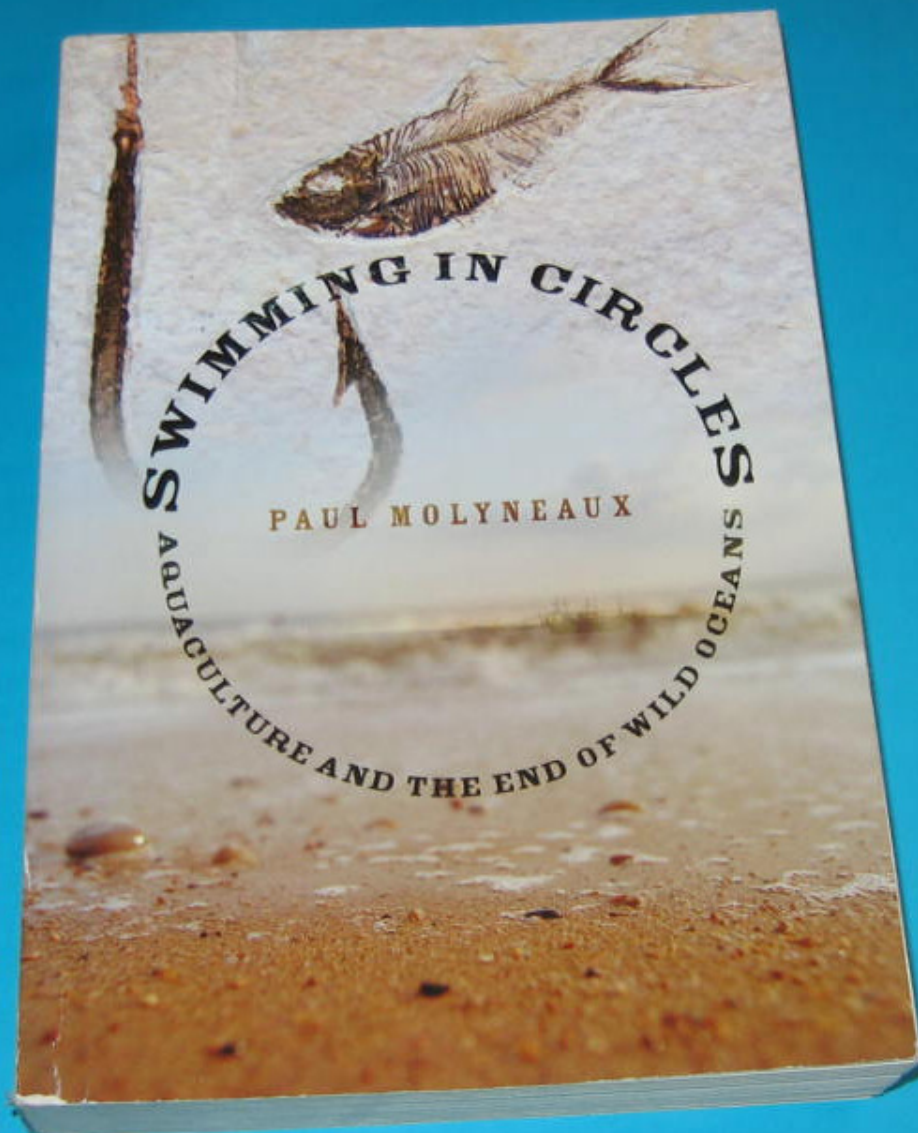




# 2004

- Shrimp farming: "the continued destruction of mangroves in poor countries to provide shrimp for people in rich countries"
- Why farm salmon?  
"why don't we just eat the blue whiting?"





# 2007

- Catalogues the difficulties and setbacks in the early evolution of the shrimp and salmon farming industries.
- Makes you wonder how these two industries have managed to survive at all, let alone flourish.

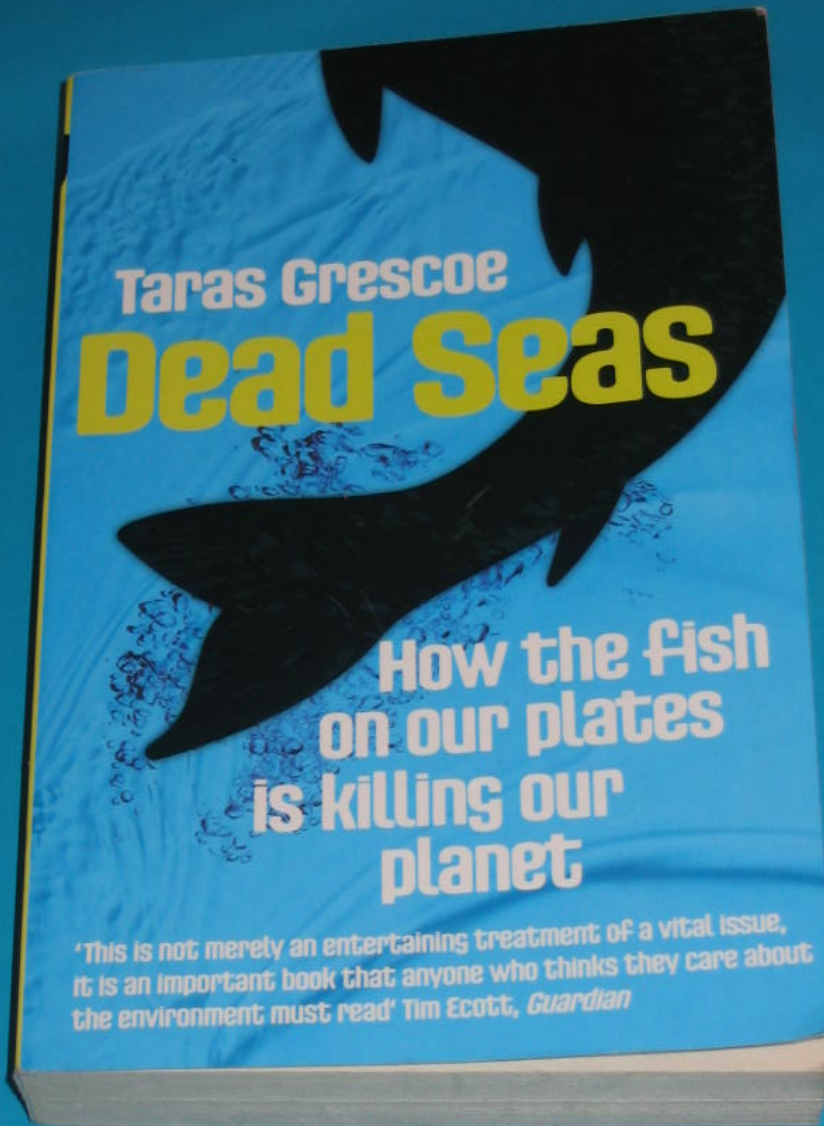


# Quotes from 'Swimming in Circles'

- Rohana Subasinghe (FAO):
  - “poor countries, by following the logic of comparative advantage, are better off generating foreign exchange by exporting high value aquaculture crops than rejecting international trade and dedicating themselves to immediate local food needs”
- Paul Molyneaux (writer)
  - has a very cautious approach that would stop the industry in its tracks.
- Jim Anderson (URI and World Bank):
  - “zero production might be sustainable but not very interesting or relevant”



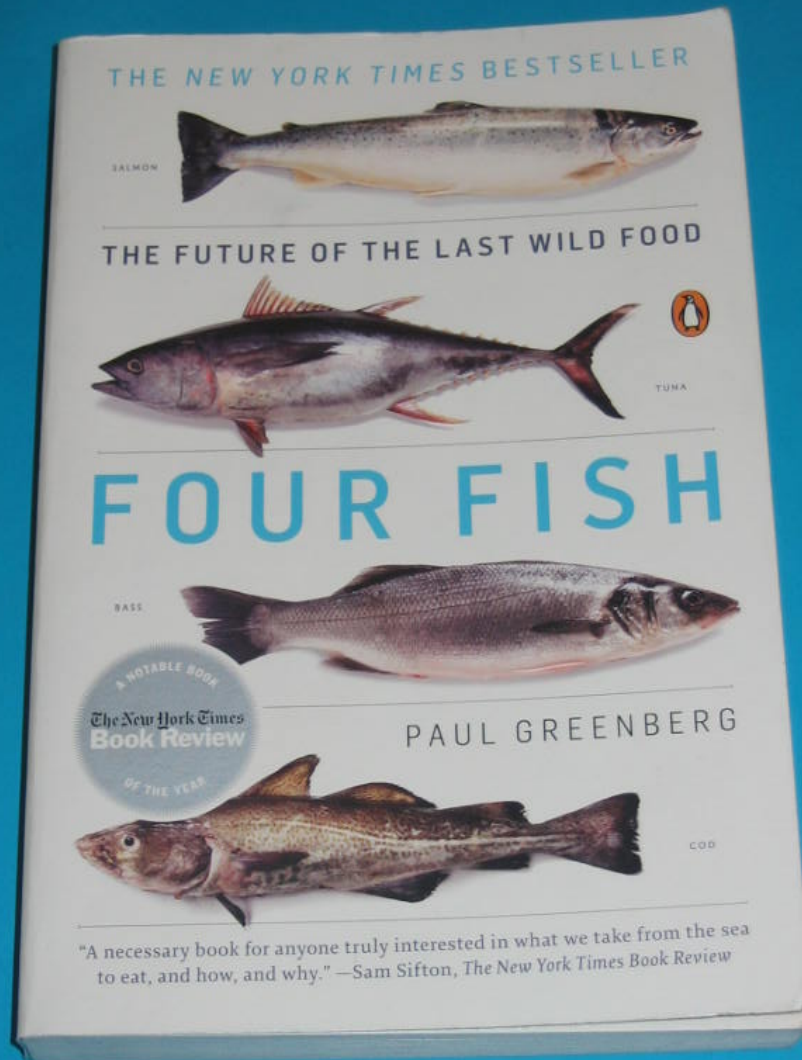
# 2008



- “[people should] demand shrimp caught in traps”
- Fish in: fish out ratio of farmed salmon = 3.9
- Increased fish farming leads to increased pressure on wild fisheries



# 2010



- Not anti-aquaculture
- Choose fish to domesticate based on their efficiency (e.g. *Seriola* rather than tuna)
- Cut interaction with wild fish (govt. subsidies to put salmon in closed systems)
- Farm tilapia not cod
- Govt. subsidised salmon diets containing seaweeds and soy
- Polyculture



DSK & Casey:  
Trial by media

Why it's time  
to revamp  
Head Start  
BY JOE KLEIN

Fan Fiction:  
Where *Harry  
Potter* never ends

Sudan:  
The violent  
birth of two  
nations

# TIME

## THE FUTURE OF FISH

Can farming save the last wild food?

BY BRYAN WALSH



www.time.com

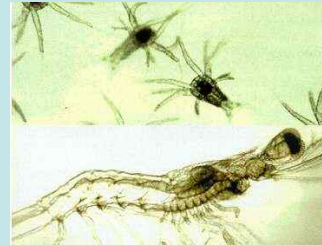
# 2011

- not anti-aquaculture
- “fish farming's bad reputation isn't entirely deserved, especially if it's compared with farming on land.”
- likes barramundi
- “We'll need to cultivate the seas, just as we do the land. If we do it right, aquaculture can be one more step toward saving ourselves.”





# BAP Standards



processor  
*one star*

+

farm  
*two star*

+

hatchery  
*three star*

+

feed mill  
*four star*

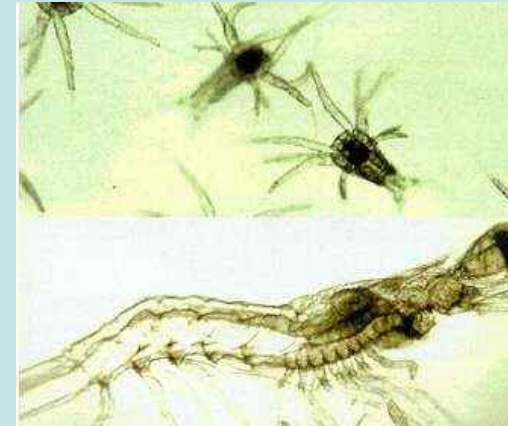
# BAP Standards under development



mussels

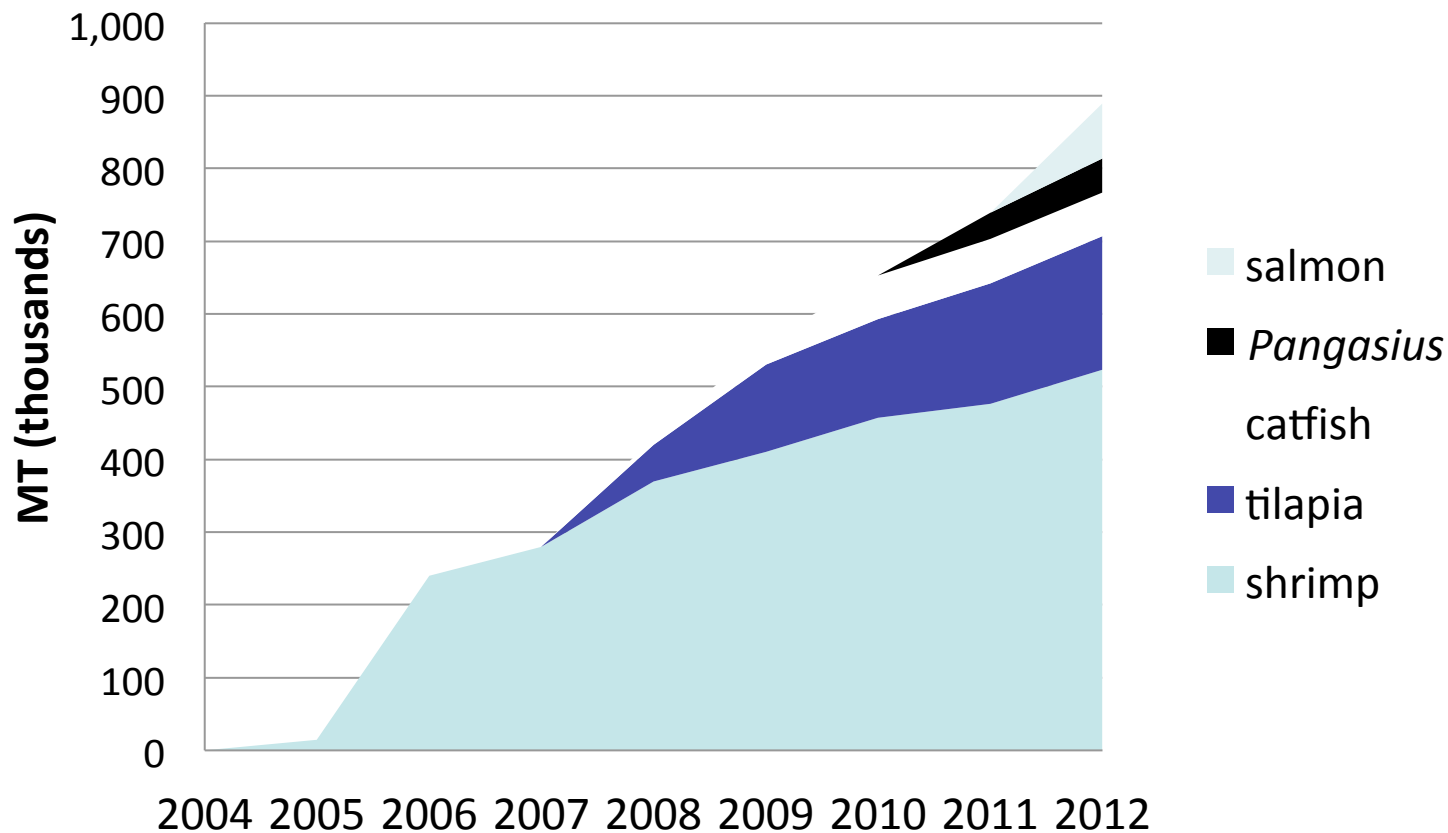


marine fish



hatchery  
(generic)

# BAP Certified Volume



# BAP program update

- GFSI compliance
- FAO compliance
- Asian fishmeal
  - IFFO improver's program and SFP



# Thank you

