



How can knowledge and data from the fishing industry be integrated in stock assessments?

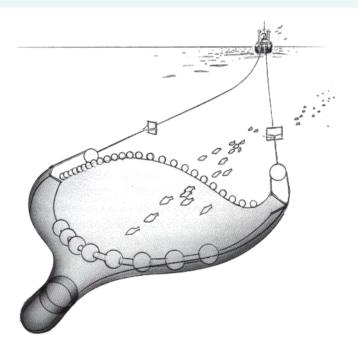
Esben Sverdrup- Jensen, CEO, Danish Pelagic Producers Organisation



About the Danish Pelagic PO

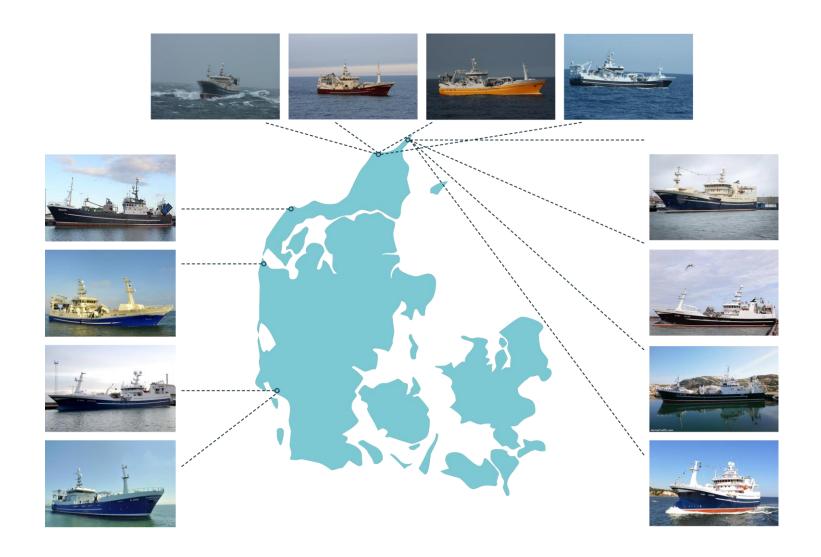
Structure:

- * About the Danish Pelagic PO
- * Science as we know it
- * Science we believe in
- * Where to go from here





Danish Pelagic Producers Organisation

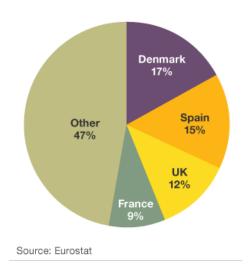




About the Danish Pelagic PO

Fishing catches by EU27 countries, 2010

Total catch: 4.9 million tonnes



About the Danish Pelagic PO:

Esben Sverdrup-Jensen, CEO

12 pelagic vessels

- + 80% of the total Danish pelagic quotas
- + 70% of the total Danish industrial quotas
- +50% of landings in DK fisheries
- +35 % of total turnover in DK fisheries

In 2016 a total combined quota of +485.000 t.

Targeting 13 different stocks in the North Sea, Skagerrak, Baltic, Western Waters, Norwegian Sea, Greenland



DPPO Science programme:

- Phd. Claus Reedtz Sparrevohn Danish representative in ICES WGs
- Collaborates on a number of projects (16) with partners in DK and international.
- First movers in the sector. Several organisations have invested in scientific staff.

Projects:

- Mackerel tagging project (Scanners in all important landing ports)
- Reconstructing historic mackerel landings (EU) *Expanding mackerel egg survey (EU/NO)
- Selective gear for Norway pout (Excluder)
- Survival of herring/mackerel in purse seine



Why do we need industry as a partner in science?

- Budget cuts and lack of public funding for national institutions
- Traditional surveys are expensive (Mackerel egg survey: 10.000.000 Euro / Swept area survey 2.000.0000 Euro / tagging even cheaper.
- Political priorities not always in line with industry needs
- Traditional science is slow in responding to developments in nature
- Traditional science is slow in responding to developments in technology
- New fisheries are being developed
- Science has become politics ICES Advice = TAC!
- Industry has developed the necessary ressources to take on science – the financial need to secure sustainable management.
- Experiences from Austarlia, NZ, Peru, Canada etc. are positive



What and how?

INFORMATION FROM INDUSTRY

- Calibrated data from vessel echo sounders/sonar (1 tb per. Trip)
- · Real time acoustic data, sampling etc.
- Catch composition
- Desk research
- Much more

ADAPTED ASSESMENT MODELS / IDEXES

- Adjust existing models to fit new data series
- Datamining systems to extract what is relevant from data pool
- Revised principles for stock assesment shorter timeframes
- Access to data?





Can the industry deliver?

Trust?

- Strong scientific base in EU (NPWG), MID + NO and others
- Strong track record on ICES participation
- Code of Conduct on participation in science
- State of art technology
- Demonstrated commitment in a number of projects.

Can the scientific community deliver?



Can the industry deliver?

Trust?

- Strong scientific base in EU (NPWG), MID + NO and others
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Can the scientific community deliver? Can politicians deliver stable management?



Science we believe in

Funding?

POTENTIAL FUNDING:

- Project funding from EU funds / National funds
- Scientific quota funding (2% of DK quota = 60 mio. dkk)
- Collaborative direct funding from fishing fleets (% of quotas) (Good experiences from collaboration on MSC certification)

WHY NOT JUST TAX DANISH FISHERIES?

- Return of investment? Who benefits from the investments/science made?
- Can politicians deliver stability? Poor track record in EU!
- Different situation in other countries with endemic species –
 Sandeel is the only strong case for Danish fisheries





NEXT STEP

- Strengthening scientific collaboration between industries / Scientific community
- Use Blue Whiting as the entry test case:
 - Develop an industry driven acoustic survey / supporting modelling
 - Mobilise and equib fleet

