

PFA
PELAGIC FREEZER-TRAWLER ASSOCIATION

Industry data on horse mackerel

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PELAC, 5 October 2016

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North Sea horse mackerel research plan

Martin Pastoors

Pelagic Advisory Council, 21 April 2015, Bilbao

... but ends up as generic horse mackerel research

Focus areas

Stock identity	Genetic analysis ✓	Chemical analysis ✓	Vessel quality analysis
Stock indicators	Vessel catch rates	New survey data ✓	


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Stock identity	Genetic analysis	Chemical analysis	Vessel quality analysis
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Work schedule on a freezer-trawler

Measured to sell !

- Mean weight
- Length class
- Fat%
- Roe (weight)
- Stomach fill
- ...



Can this be used to assess horse mackerel stock structure?



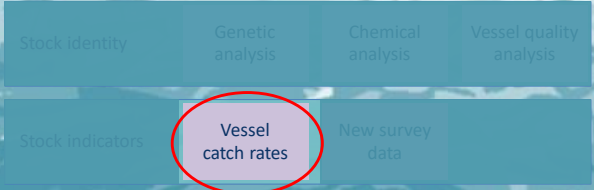
Channel Horse mackerel Western Horse mackerel

Where we are with the analysis ?

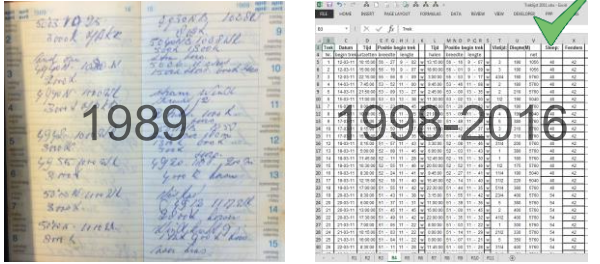
- Well underway for horse mackerel Benchmark November 2016
- Reading in and checking data for ~ 10 vessels
- ~ 6500 horse mackerel samples (out of ~25000 samples)
- ~ 2005-2016

Possibly: use photographic material

Focus areas

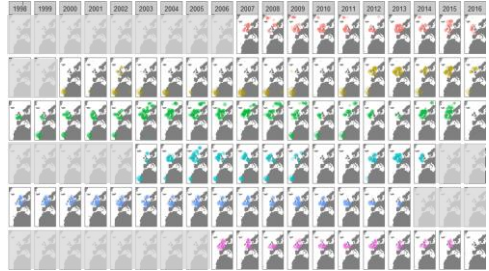


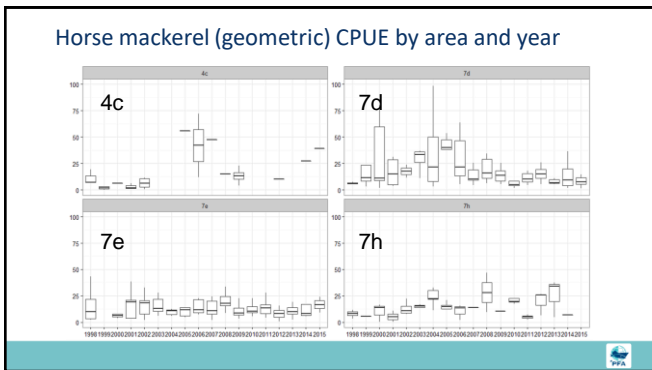
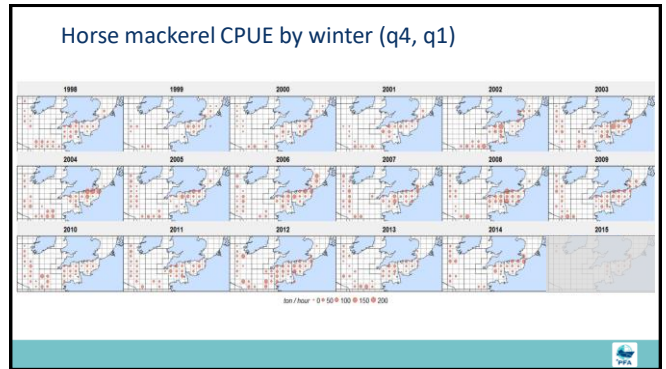
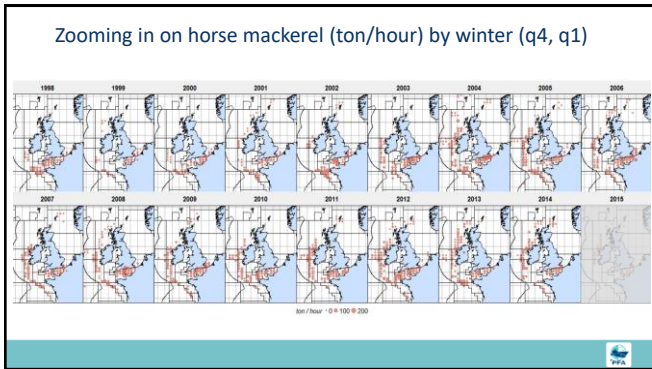
Method: skipper's 'diaries' (haul by haul)



1989 1998-2016

All the data together, by vessel and year





To do: modeling horse mackerel CPUE

- Location (coordinates, ices rectangle or sea square)
- Time (year, quarter or month)
- Vessel
- Temperature, tide, wind (<http://marine.copernicus.eu>)

Current status

- Data checking completed
- Modelling initiated:
 - Treat commercial catch rates as potential abundance indicators
- Results to be compared with survey analysis
- Will be ready for horse mackerel benchmark workshop 11/2016

