

Oceans Past – virtual event, 13 May 2020

# 1000 YEARS OF EUROPEAN COMMERCIAL EEL FISHERIES

BO POULSEN  
DEPARTMENT OF POLITICS AND SOCIETY  
AALBORG UNIVERSITY



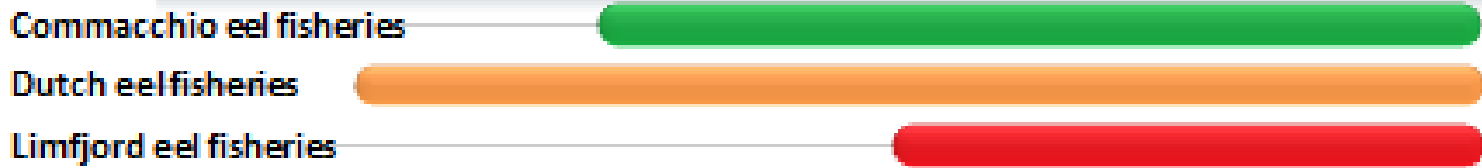
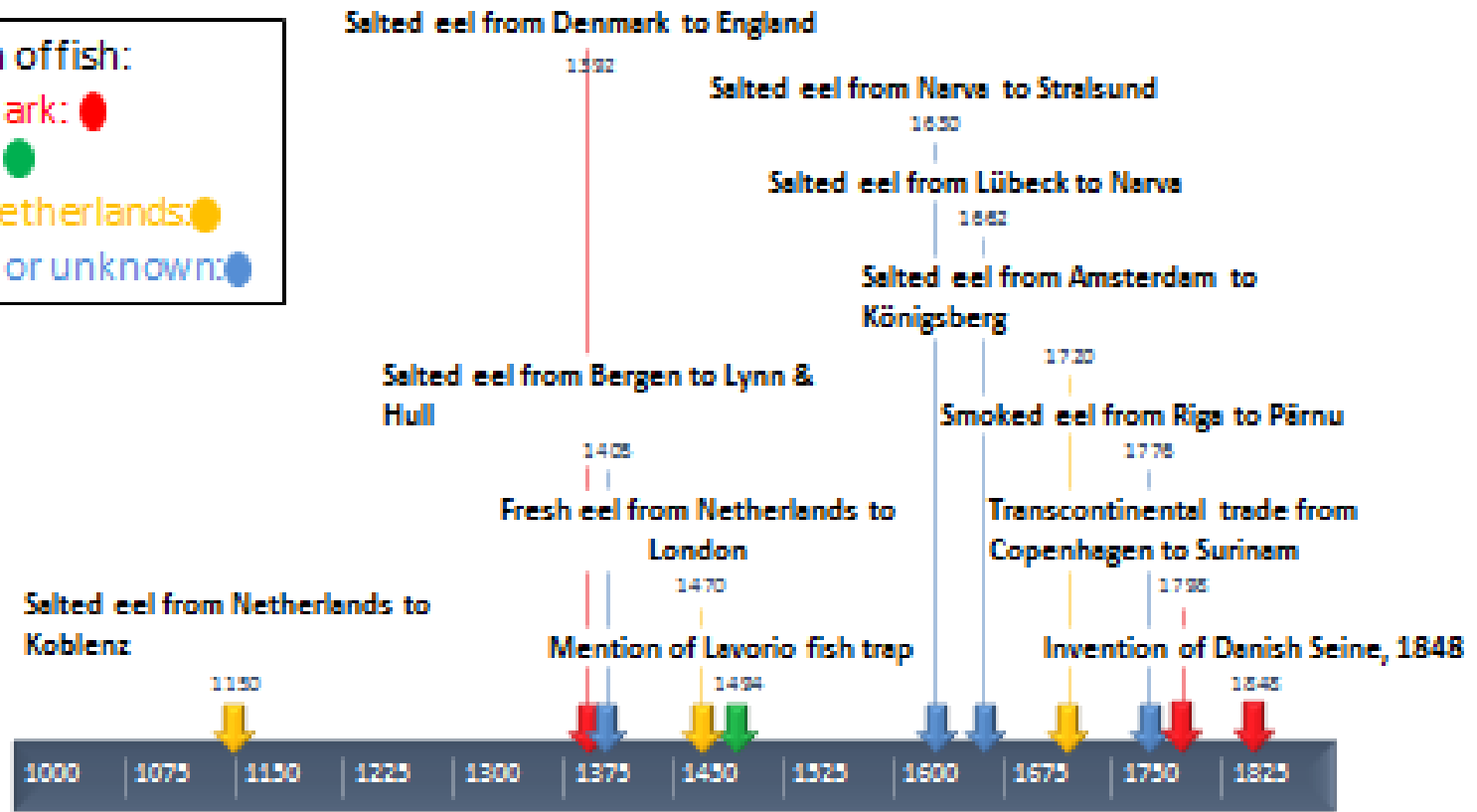
AALBORG UNIVERSITET



Lifecycle of the European eel  
 (Lat. *Anguilla anguilla*)

# Commercial eel (*Anguilla anguilla*) fisheries and international trade in Europe c. 1100-1850

Origin of fish:  
 Denmark: ●  
 Italy: ●  
 The Netherlands: ●  
 Other or unknown: ●



# Commachio (South of Venice)



# Eel market in Amsterdam, Dam sq.

Visitor to the eel market in 1808 stated:

“...in comparison to fishwives in other countries (their garments) prove that they enjoy a certain wealth. The earrings and gold necklace, as well as the purse strapped to a silver semi-circle, the snuffbox and the silver shoe buckles which these women often wear, are indisputable evidence (of this)”  
(Heuvel, 2012).



“That’s right, uncle, talk to your heart, like the housewife who yelled at the eels she was putting in her pie. She hit 'em on the head with a stick and shouted, “Down, you naughty things, down!” That was the woman whose brother wanted to be nice to his horse , and buttered its hay.”

- Shakespeare, King Lear.

### London custom accounts:

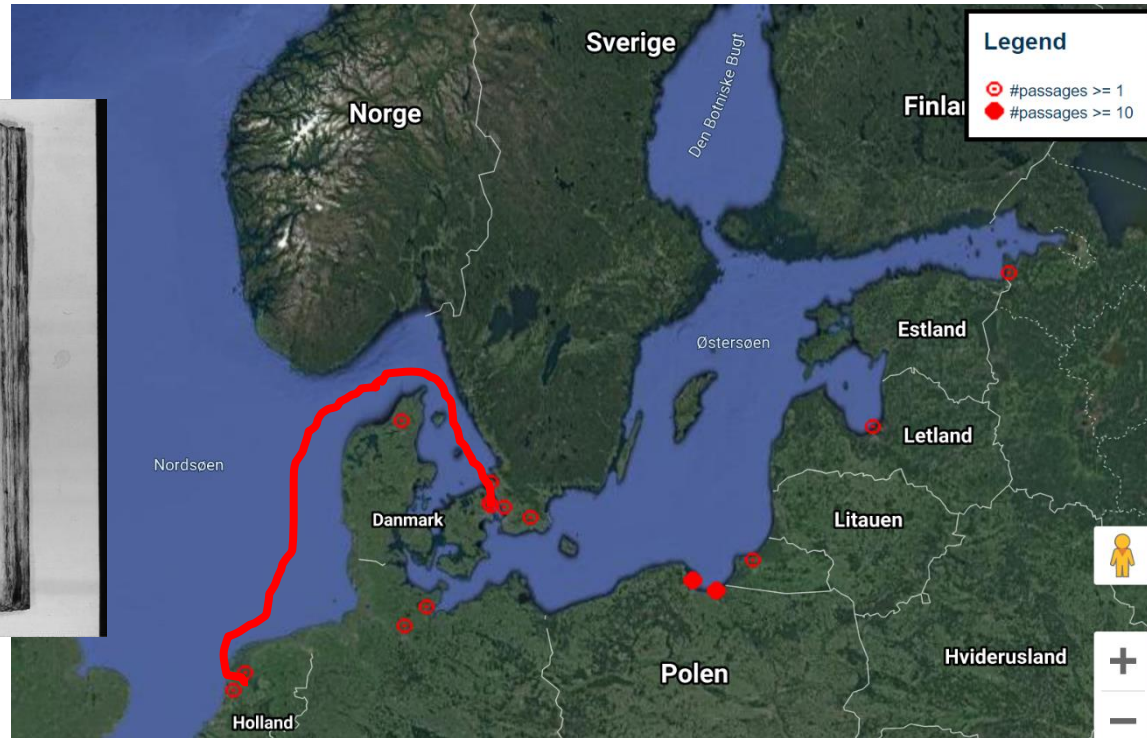
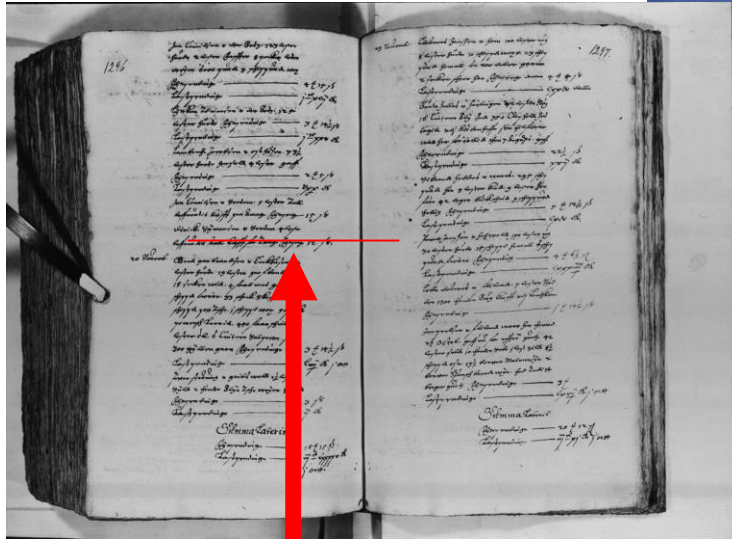
- Fresh eel from c. mid-1400s - ‘anguillis recentibus’
- 1502/03: >20 eel vessels docking
- 1600s: ~50 metric tons annually from Zuiderzee
- Napoleonic Wars: counterband commodity paid in gold
- Last shipment to London: 1939.



Twitter: @greenleejw, "Surprised eel historian"

# Eel shipments dead and alive through the Danish straits before 1634 (n: >100 shipments)

source: (www.soundtoll.nl)

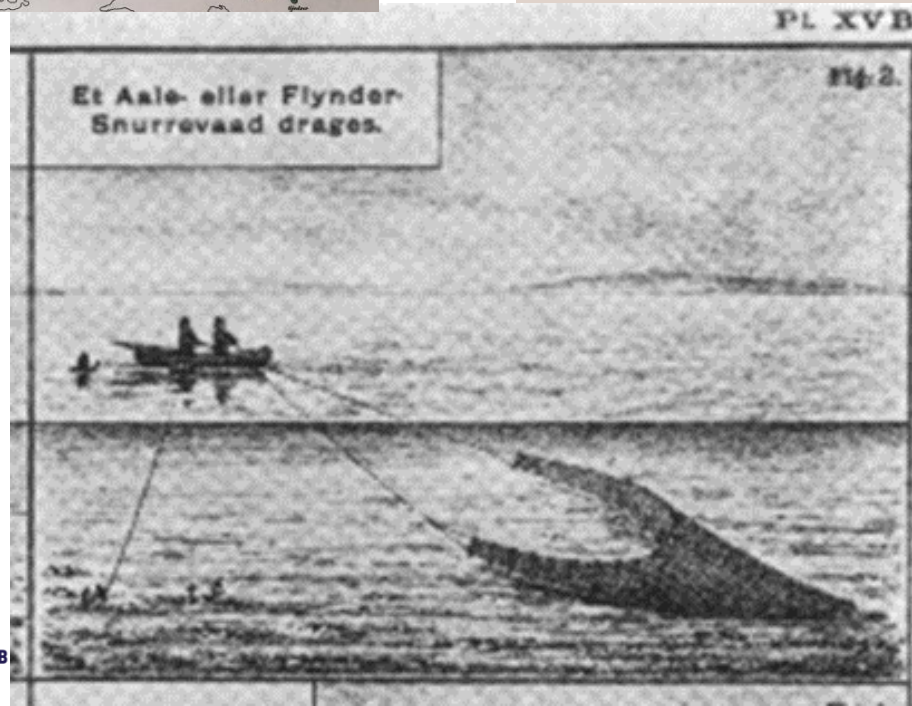


“Aall leffuendis kjøfft paa Amage,”

Jan Carnilson shipping from south of Copenhagen to Zaandam north of Amsterdam. November 1618



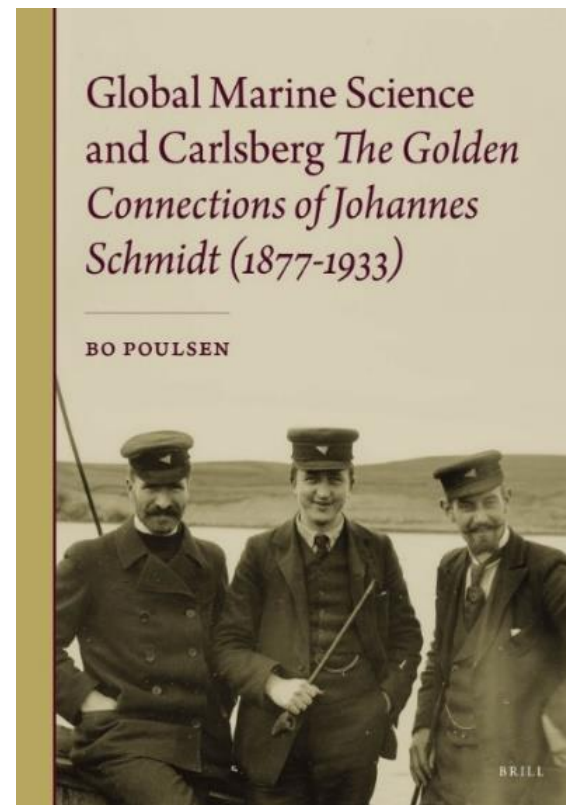
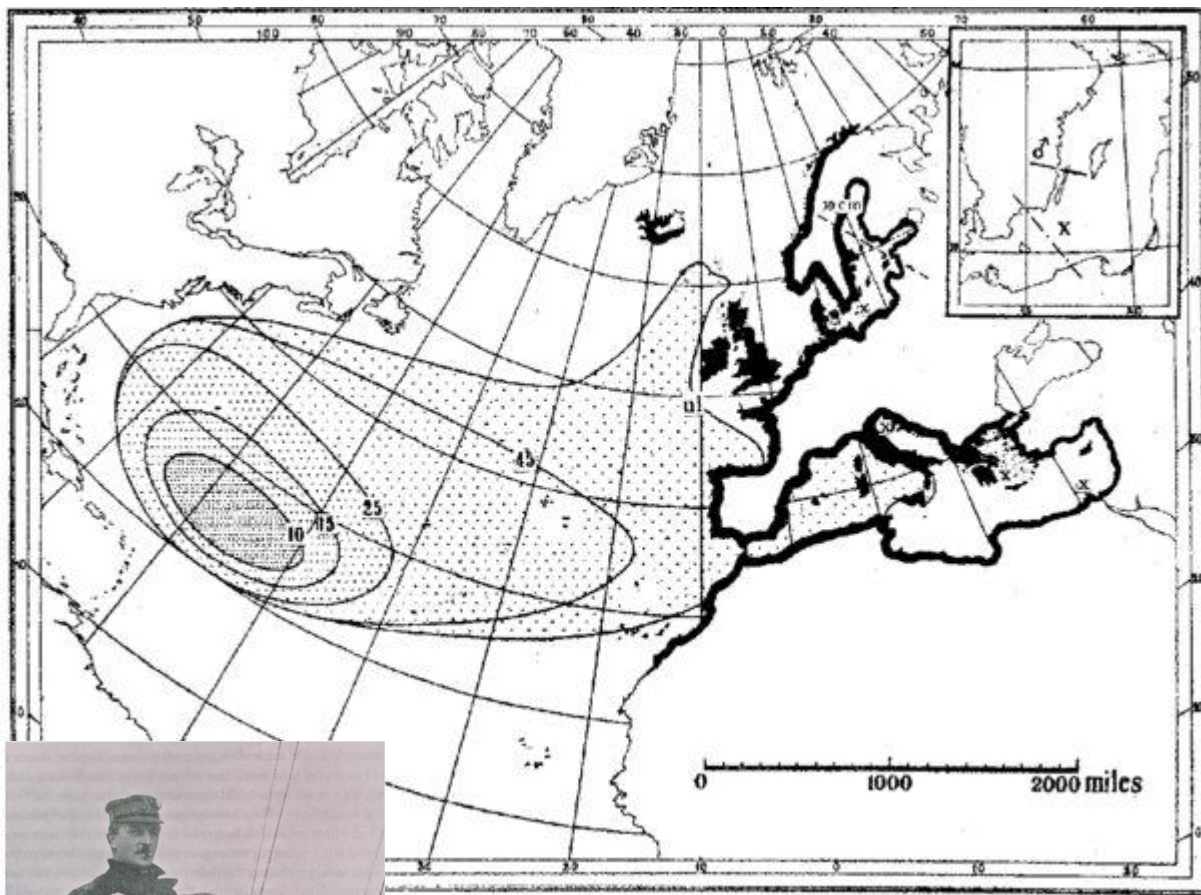
"Eelcake" – one of 42 Danish recipees with eel



Danish seine invented in 1848

AALB

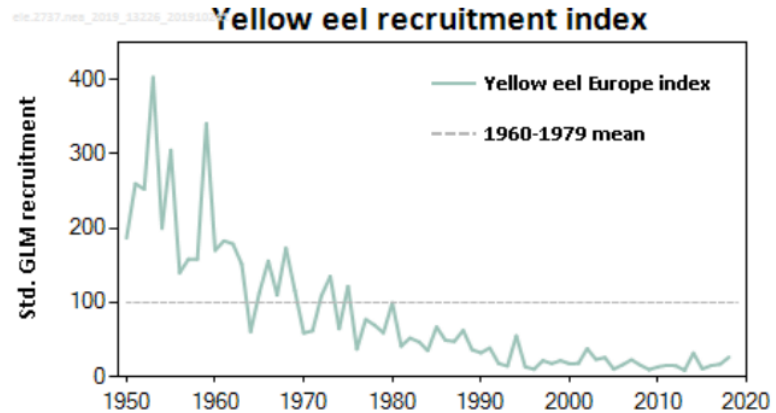
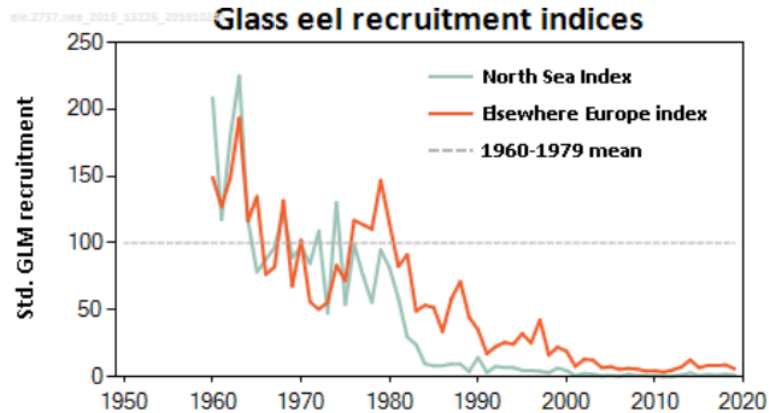
# Deep sea investigations -> breeding place of Atlantic eel, 1903-1922



C.G.Joh.Petersen:

"The eel does not spawn in our waters, safe to catch as many as possible" (1905)

"The eel does not belong in one country, better left to the Great Powers to decide" (1907)



**Figure 1** European eel. **Left panel:** indices, geometric mean of estimated (Generalized Linear Model; GLM) glass eel recruitment for the continental “North Sea” and “Elsewhere Europe” series. The GLM was fitted to 46 time-series comprising either pure glass eel or a mixture of glass + yellow eels. The predictions were then scaled to the 1960–1979 average  $\bar{p}_{1960-1979}$ . In the Baltic area, recruitment occurs at the yellow eel stage only. The “North Sea” series are from Norway, Sweden, Germany, Denmark, the Netherlands, and Belgium. The “Elsewhere” series are from UK, Ireland, France, Spain, Portugal, and Italy. **Right panel:** Estimated (GLM) yellow eel recruitment trends for Europe. The GLM was fitted to 13 yellow eel time-series and scaled to the 1960–1979 average  $\bar{p}_{1960-1979}$ .

ICES. 2019. European eel (*Anguilla anguilla*) throughout its natural range. In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, ele.2737.nea. <https://doi.org/10.17895/ices.advice.4825>.

- (a) fishing
- (b) hydropower, pumping stations, and other water intakes
- (c) habitat loss or degradation
- (d) pollution, diseases, and parasites
- (e) other management actions that may affect levels of predation, e.g. conservation vs. control of predators.
- (f) Climate change may have effects, but these have not been quantified.



# Complex challenge: Some fishing is legal, so is consumption



## Fjorden er smækfyldt af ulovlige åleruser



Politiet har været med til at samle de ulovlige ruser sammen. Der er bødestarf for at udsætte ulovlige ruser. Privatfoto

På to uger har Fiskerikontrollen hevet 93 ulovligt udsatte åleruser op af Ringkøbing Fjord - vicefiskeriinspektør har aldrig set magen.



Mes

RINGK  
Jylla  
støtt  
vildsl

112  
Politi  
øje m

HVIDE  
Adva  
Lalan  
Sønd  
næst

RINGK  
Sene:  
smitt

## Conclusion – lessons from oceans past:

- Commercial eel fisheries since at least 1100s
- Eel subject to probably first international trade in live fish
- Source of technological innovation
- Long-term perspective matters to understand longevity of culture and dietary preferences



**THANK YOU!**



**AALBORG UNIVERSITET**