



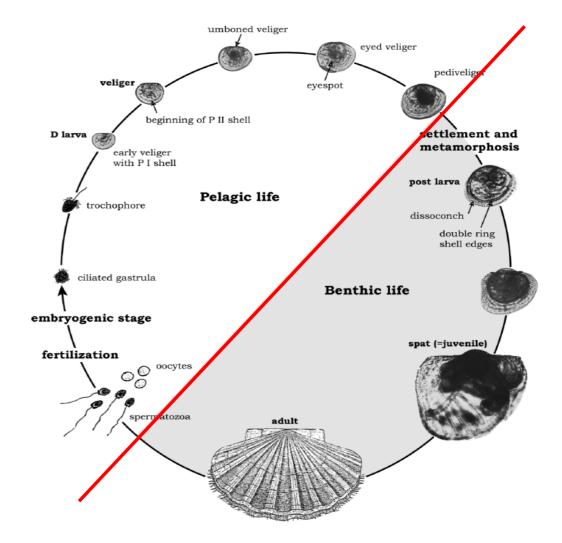
The King scallop (*Pecten maximus*) fishery in the English Channel. The case of the bay of Seine: a complex management system

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Introduction: the life cycle of King scallop (*Pecten maximus*) in the Channel

- ➤ Spawning from the end of April to June (first peak) with replicates throughout the summer, and 1 secondary spawning peak at the end of August.
- > Planktonic larvae stage : average duration 30 days
- Metamorphosis and fixation
- > "Free-living" at around 3 months
- Very fast growth for the first 2 years
- Sexual maturity and first spawning at 2 years old







Introduction: Residual flow in the English Channel

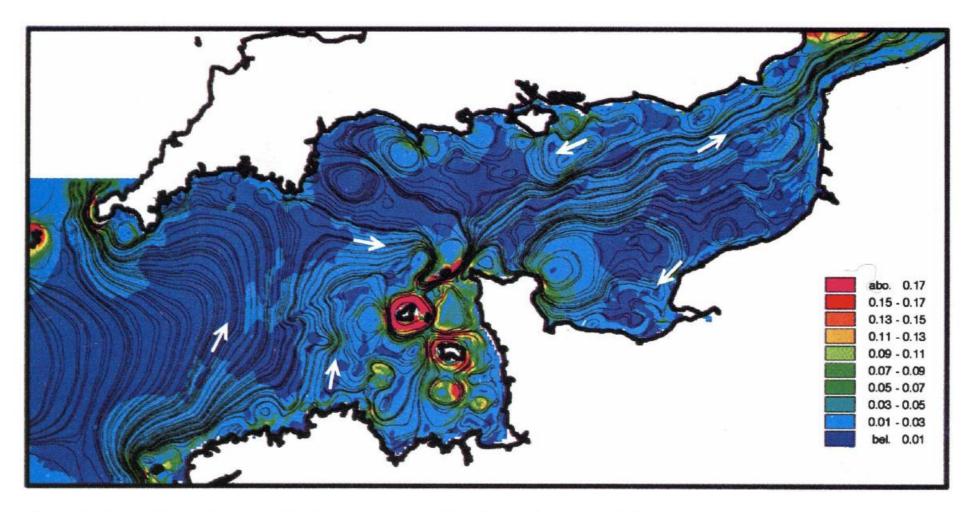


Figure 1. Streamlines of tidal residual flow in the English Channel, computed for a constant medium tidal amplitude and without wind (from Salomon and Breton, 1991).





Introduction: Seabed sediments in the English Channel

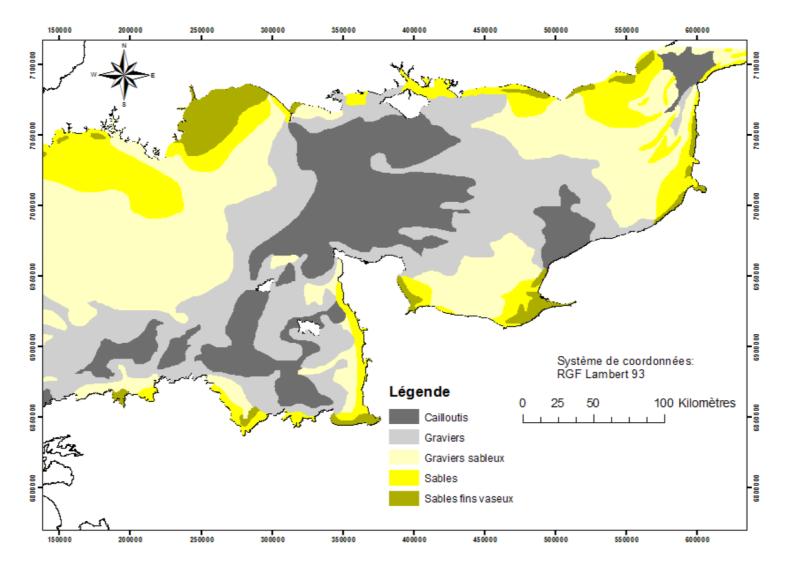
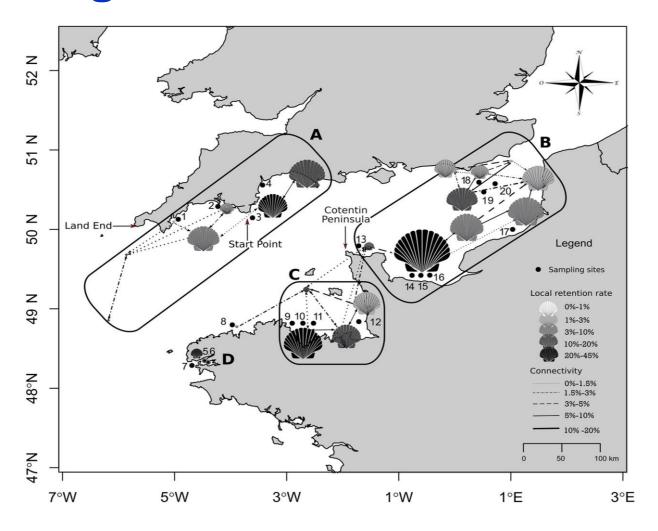


Figure 13 : Distribution des sédiments superficiels en Manche (Larsonneur et al., 1982 ; numérisation personnelle)





Introduction: Three different and relatively independent stocks in the English Channel

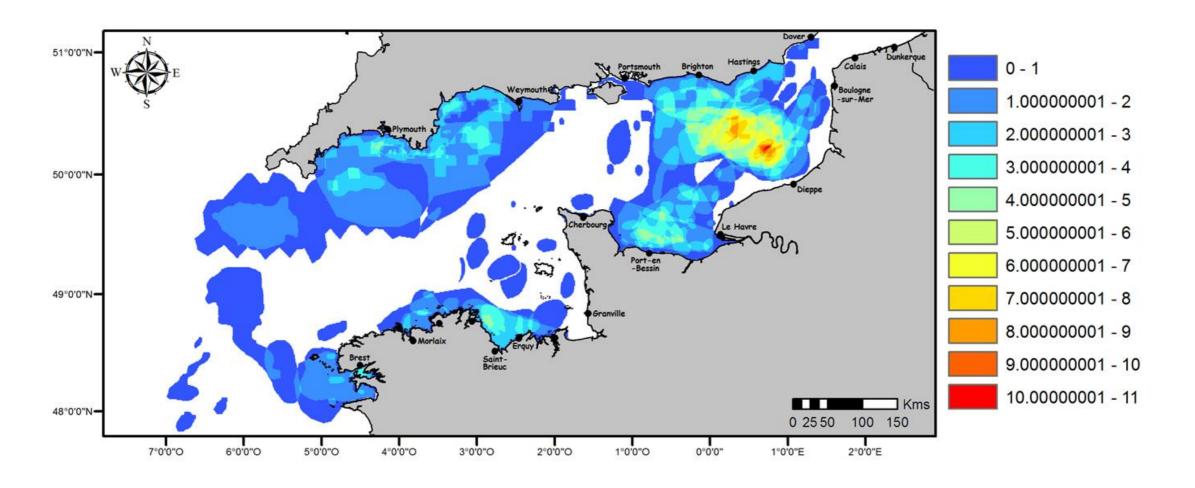


Handal W. et al., 2020. New insights on the population genetic structure of the great scallop (*Pecten maximus*) in the English Channel, coupling microsatellite data and demogenetic simulations. Aquatic Conservation, Volume: 30, Issue: 10, Pages: 1841-1853, DOI: (10.1002/aqc.3316)





Introduction: different fishing grounds for King scallop in the Channel

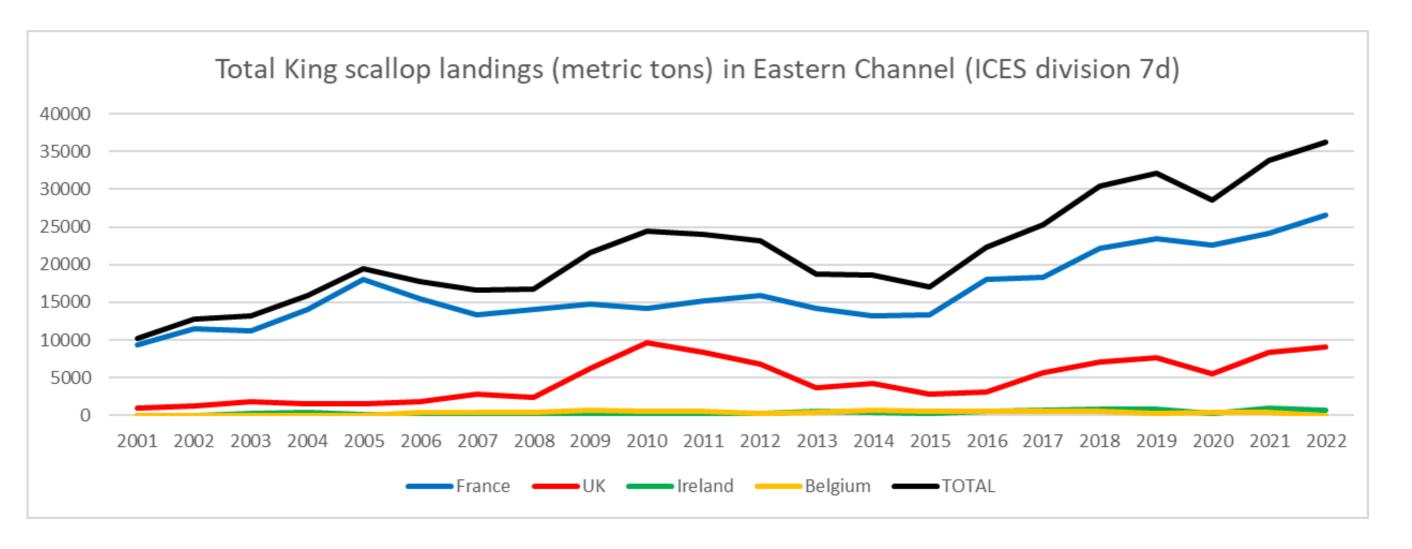






Updated key figures on the King scallop fisheries in the Channel

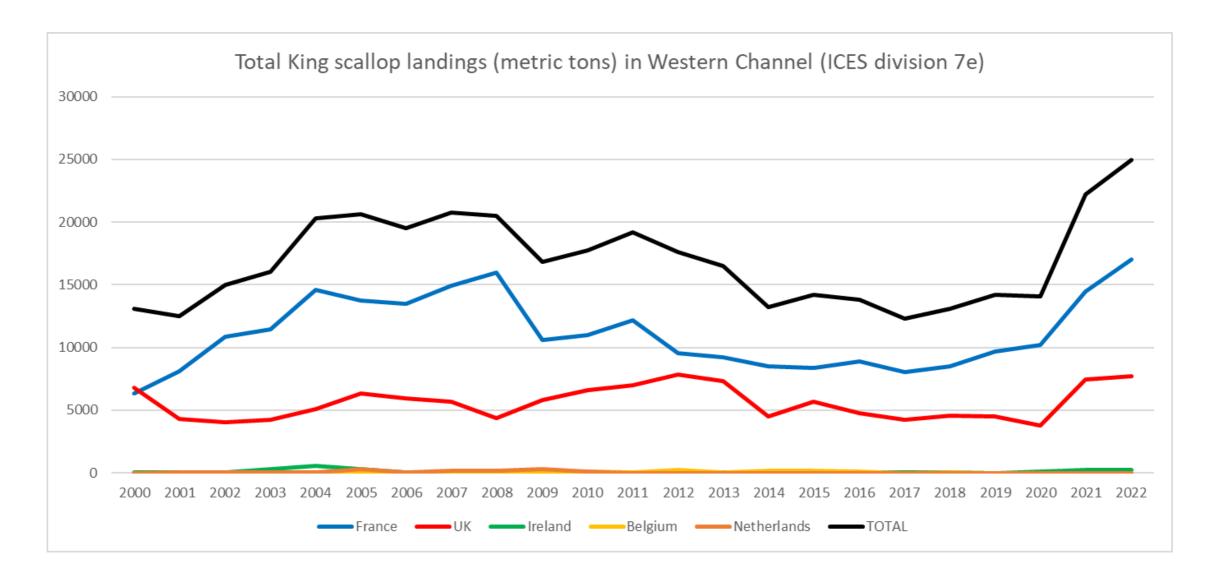
Trends of total landings in Eastern Channel (2000-2022)







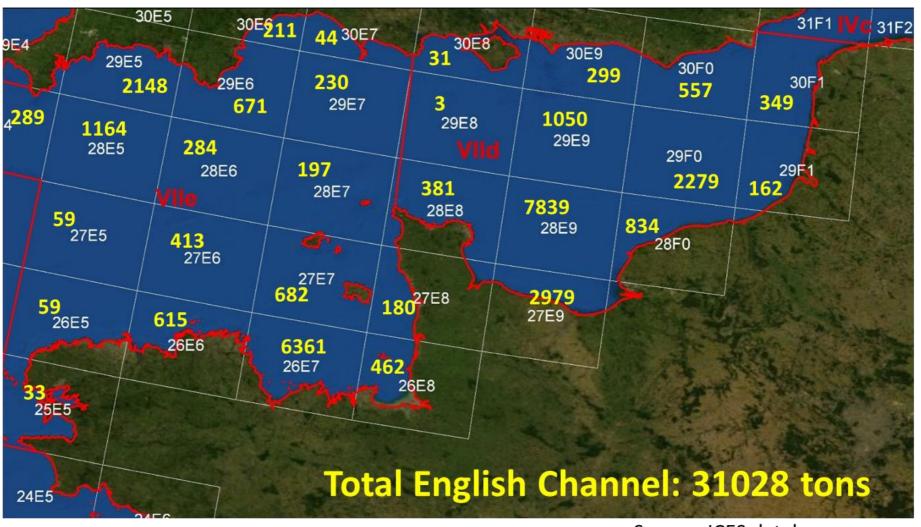
Trends of total landings in Western Channel (2000-2022)







King Scallop landings in 2015 (all countries) 14176 tons in Western Channel, 16851 tons in Eastern Channel

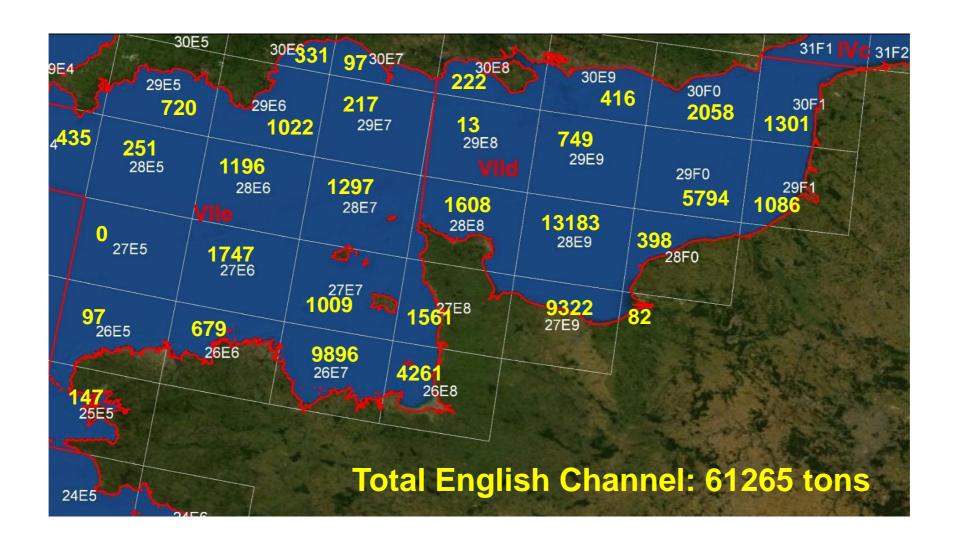


Source: ICES database



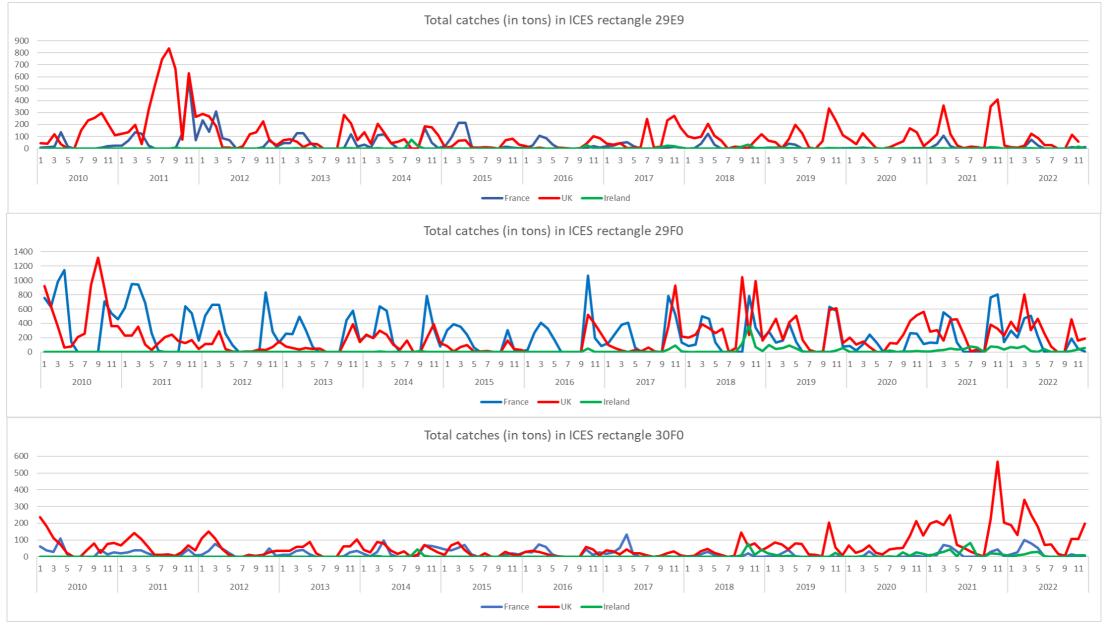


King Scallop landings in 2022 (all countries) 24949 tons in Western Channel, 36316 tons in Eastern Channel





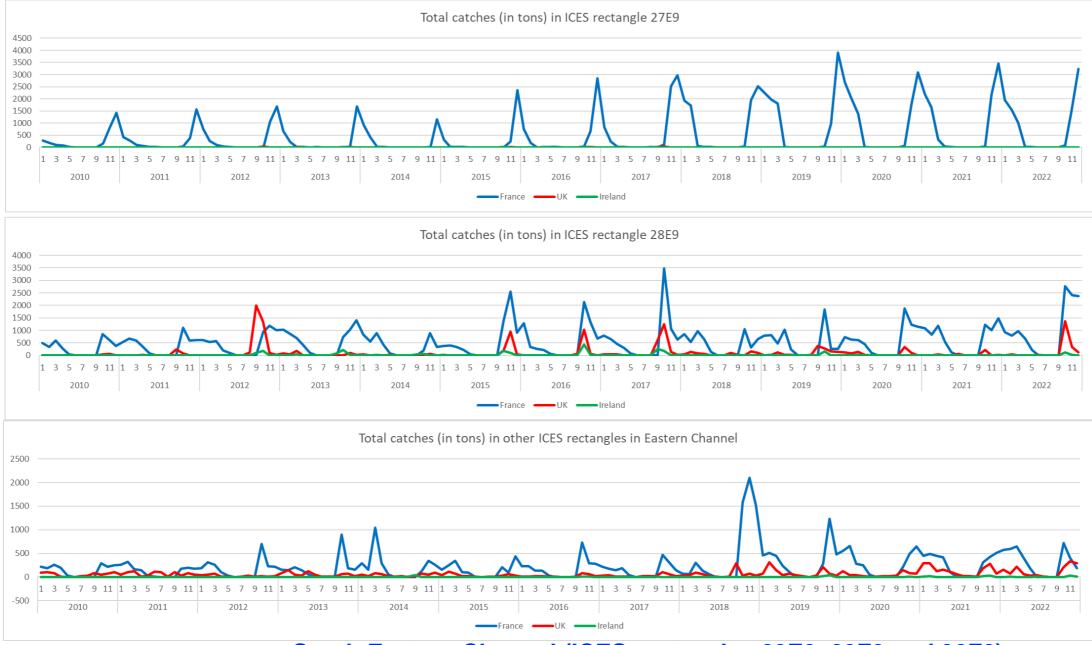








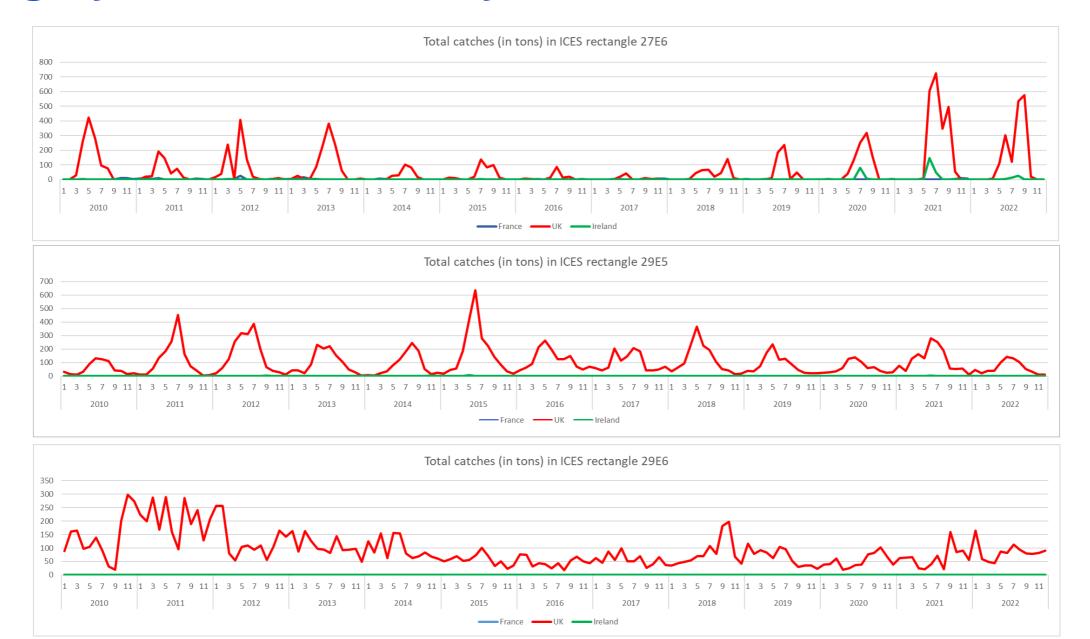
North Eastern Channel (ICES rectangles 29E9, 29F0 and 30F0)







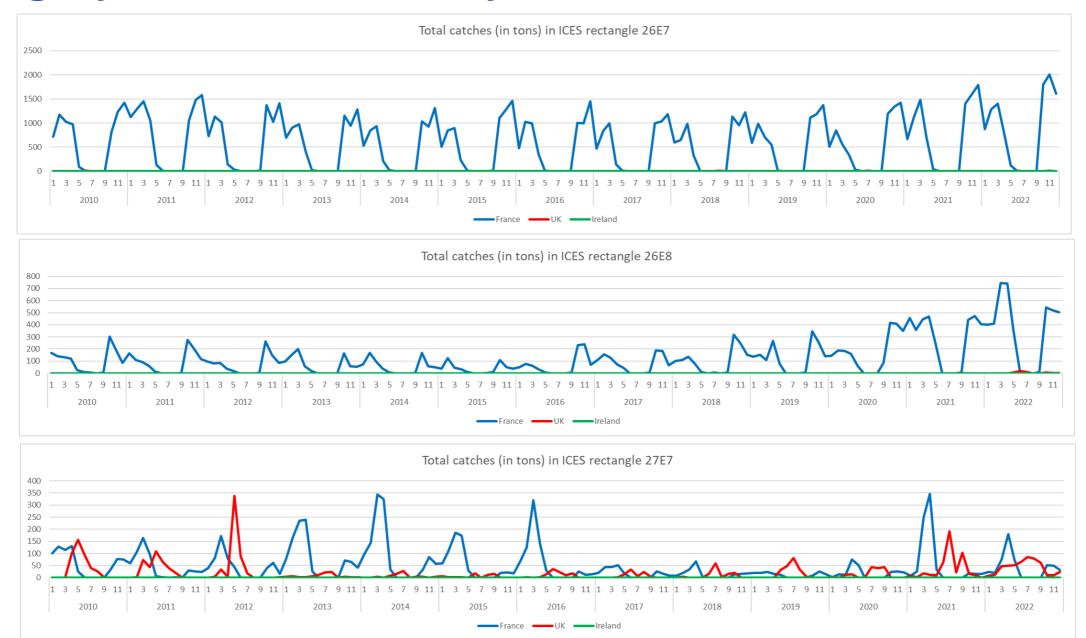
South Eastern Channel (ICES rectangles 29E9, 29F0 and 30F0)







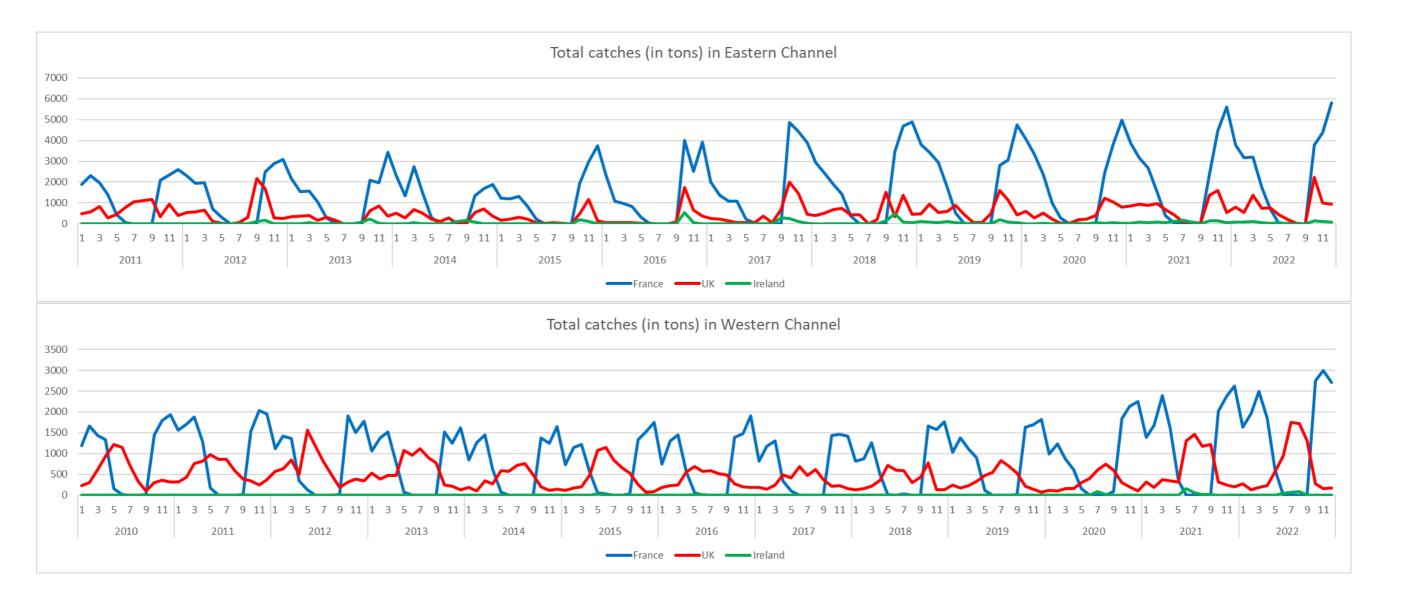
North Western Channel (ICES rectangles 27E6, 29E5 and 29E6)







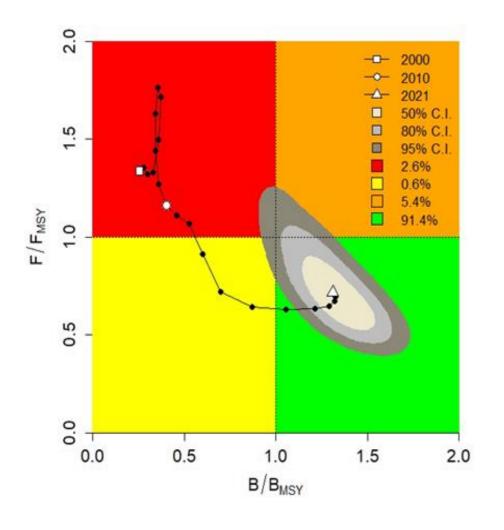
South Western Channel (ICES rectangles 26E7, 26E8 and 27E7)







Stock status in Eastern Channel 7d



-□- 2000 **-**○- 2010 2021 50% C.I. 80% C.I 95% C.I 28.9% 0.3% 43.9% F/F_{MSY} 26.9% 0.5 0.0 0.0 0.5 1.0 1.5 2.0 B/B_{MSY}

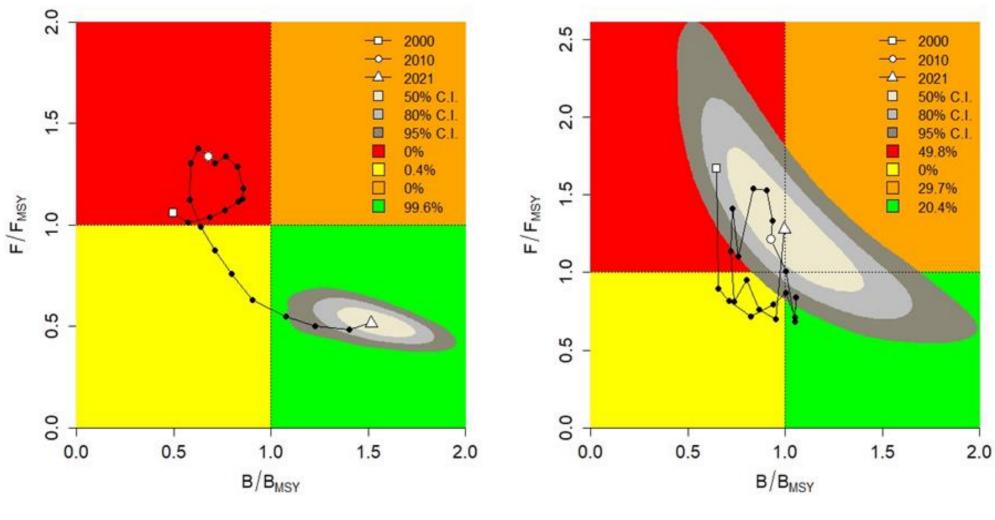
Bay of Seine

Eastern Channel





Stock status in Western Channel 7e



Granville Bay (including the bay of Saint-Brieuc)

Northern stock (south Cornwall waters)





Focus on the Bay of Seine King scallop fishery

Introduction: The King scallop (*Pecten maximus*) in France: 1st species of the French fisheries



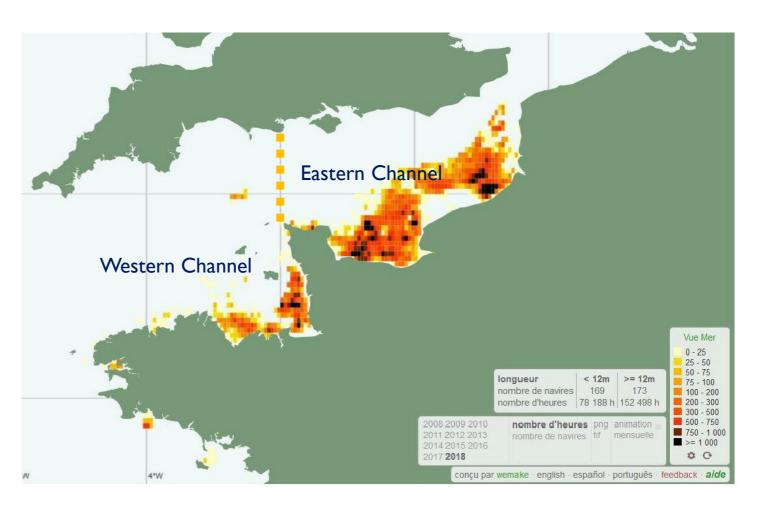




King scallop fishing grounds in France: an English Channel history

Inshore fishing areas

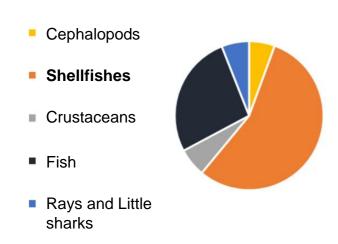
•	Eastern Channel	35 000t	250 vessels
•	Bay of Seine	25 000t	220 vessels
•	North of Cotentin	100t	10 vessels
•	Granville bay	4 500t	100 vessels
•	Bay of St-Brieuc	15 000t	250 vessels
•	Rade de Brest	200t	60 vessels
•	Glénan	200t	
•	Quiberon	200t	
•	Pertuis charentais	200t	80 vessels

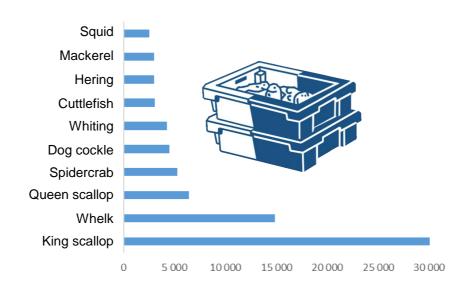


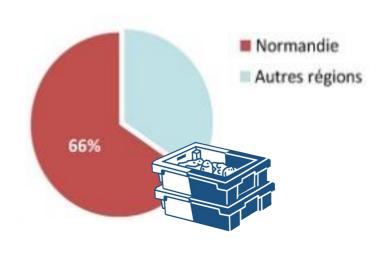




The King scallop: 1st species in Normandy







>30% of landings in Normandy!

Between 30 and 40 000 tons

2/3 of shellfish landings in France!





The King scallop in the bay of Seine: a complex system of management

Resource access at the national level in France

• Fishing season from 1st of October to 15th of May (closed to fishing in summer during spawning season and peak growth period)

In the Bay of Seine:

- Open from mid-November to end of March
- Limitation of trips/week: 3 or 4 days
- Limitation of fishing hours per trip: 1.5 to 4 hours/trip

Technical measures in the bay of Seine:

Licence system: 220 fishing vessels allowed

Limit of length: under 16 meters

Limit of number of dredges: ≤16 Baie Seine

• Regulation of dredges (in France): 97mm ring size diameter







The King scallop in the bay of Seine: a rotational closure, a unique system in Europe

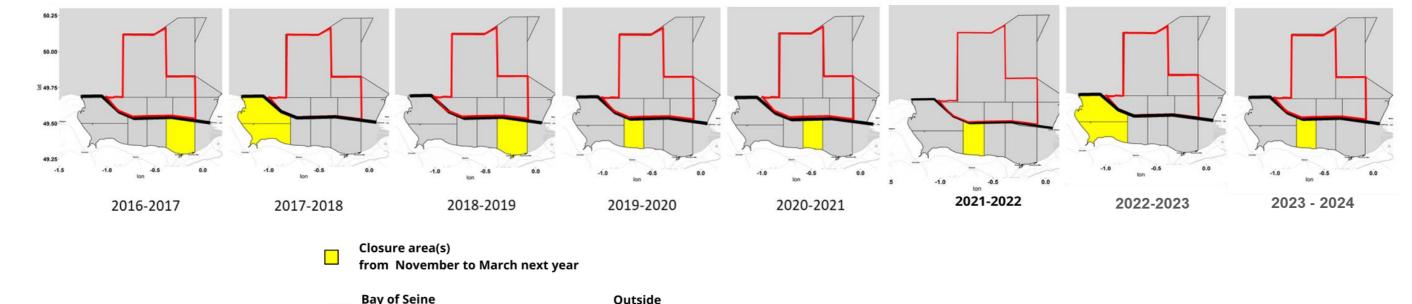
Biological measures:

• MLS: 11 cm

Limitation of catch per trip: 1 ton to 1.8 tons/vessel/trip

(French territorial waters)

Rotational closure since 2016

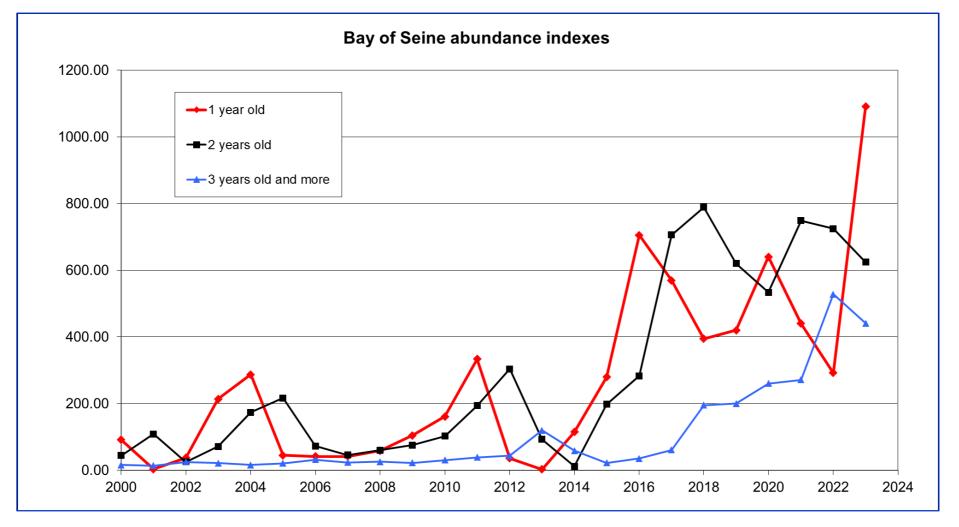


(European Union waters)





The King scallop in the bay of Seine: a tough and restrictive system for French fishermen, but a stock in excellent condition today a success story??

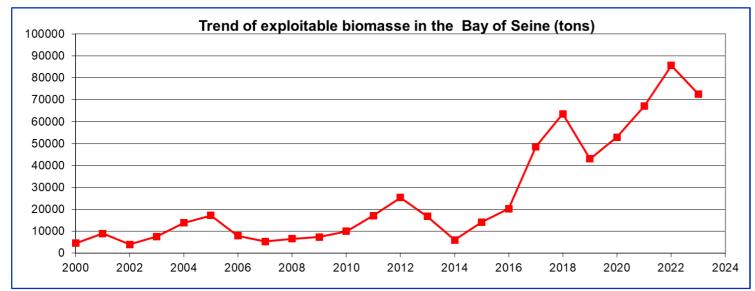


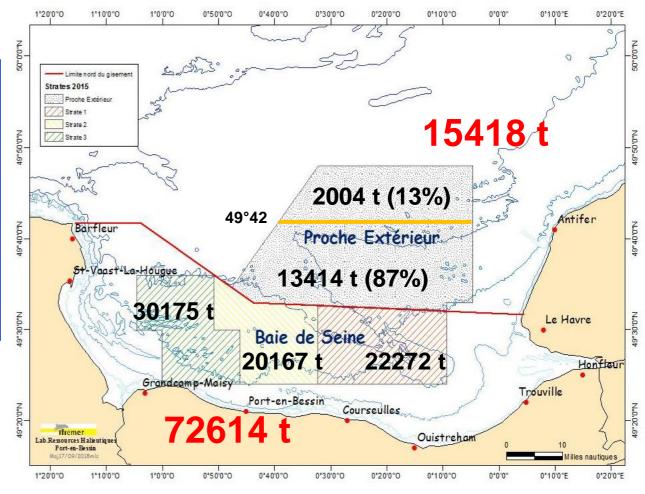






The King scallop in the bay of Seine: a tough and restrictive system for French fishermen, but a stock in excellent condition today a success story??





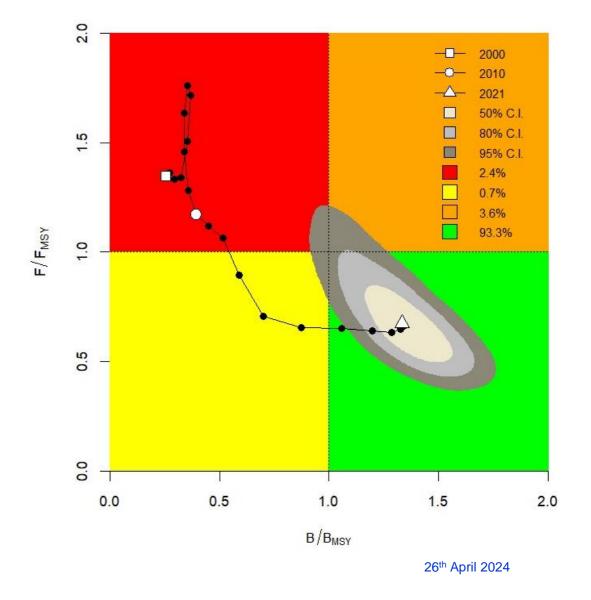






The King scallop in the bay of Seine: a tough and restrictive system for French fishermen, but a stock in excellent condition today a success story??









Thank you for your attention!







