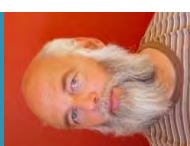


2019-Jun-27 SEG's 10th anniversary

Eel, the eurofish



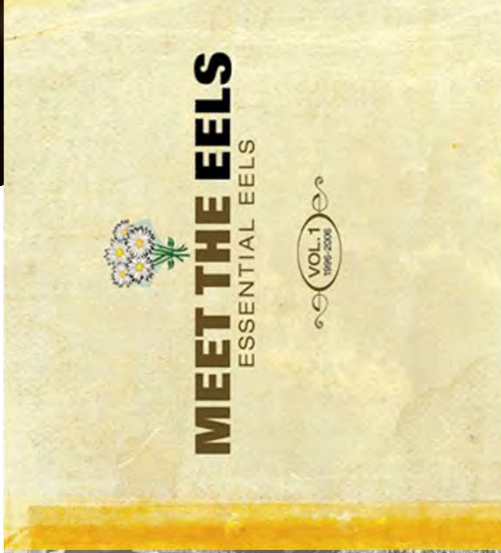
historical management challenges the future



Willem . Dekker @ SLU . SE

Preview of my talk

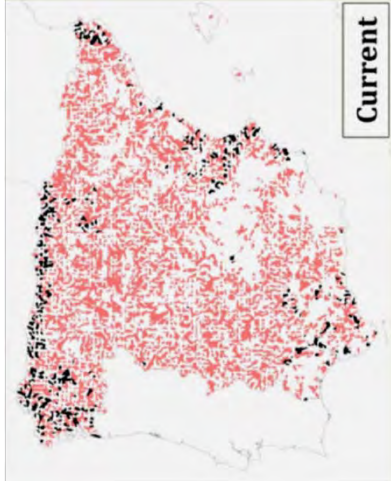
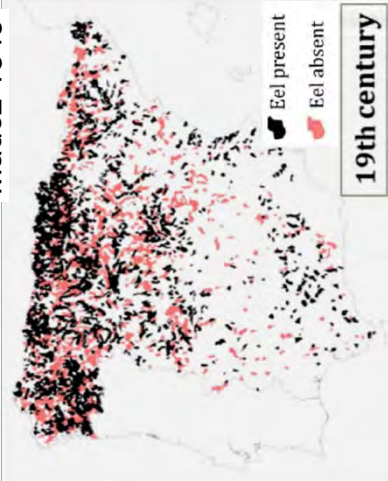
- a. Sketch the history of the eel fisheries
- b. Trends in stock and fisheries
- c. Management: a long-lasting tragedy
- d. Breaking this historical dead-lock
- e. Success – strengthen the key-factors!
- f. Show nice pictures, tell fine stories.



Subsistence fisheries: Valencia

VILLA-GUTIERREZ: l. con avunt. en la prov., part. jud., aud. terr., c.g. y dicio. de Burgos (3 leg.). sir. en un fértil valle, con buena ventilación y CLIMA frío, pero sano; se padecen pulmonías e inflamaciones. Tiene 60 CASAS; escuela de instrucción primaria dotada con 24 fan. de trigo; una igl. par. (Stos. Emeterio y Coladonio) servida por 2 beneficiados con la cura de almas. El téam. confina N y E. Medi-nilla; S. Vivestre de Muió, y O. Estepa. El TERRENO es de buena calidad; le fertiliza un r. nombrado *Normazuela*, y le cruzan varios CAMINOS locales, paon.: cereales, legumbres y vino; cria ganado vacuno y lanar; caza de perdices, liebres y conejos; y pesca de anguillas, truchas y barbos. Pobl.: 32 vecinos. 130 almas. Alt. 500 m. Lat. 41. 19. 387. CONTR.: 3.057 rs. 6 mrs.

Madoz 1845



Madoz (1845), Clavero & Hermoso (2015)



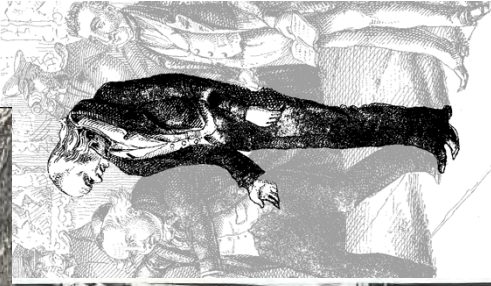
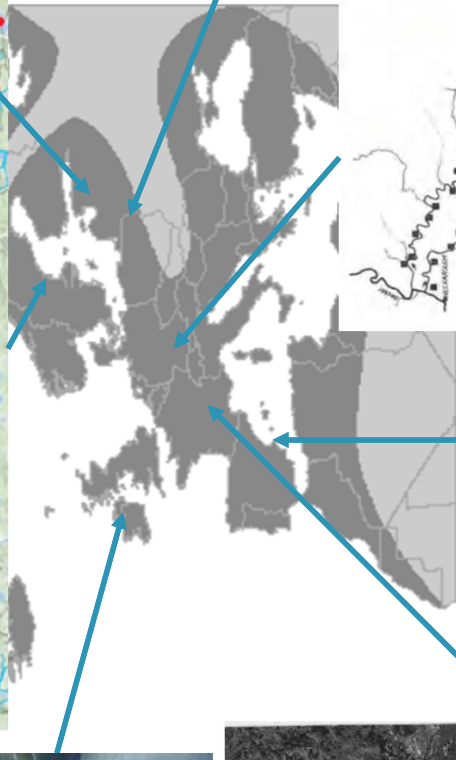
Sanze-Reguart 1791: No glass eel!



1950: 5 tons glass eel, now 0.1 t



Subsistence fisheries everywhere

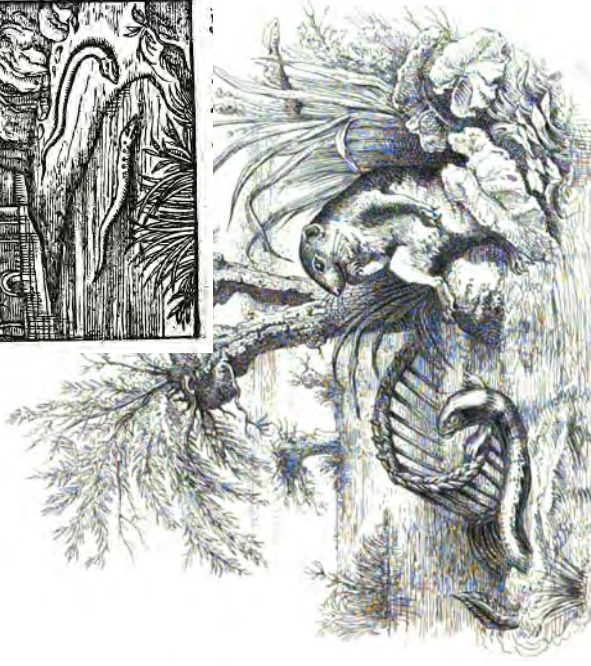


Fat, Food and Fables

50 – 500 kg per fisher per year. A million fishers?



Sörfors ålhus	1/2 t:a ål
Törringe ålhus	1/2 L11 smör
Värsta ålhus	
<i>Stöde sn</i>	
Grösjöbäckens ålhus	1/2 L11 smör
Böle ålhus	1/2 "
Viskans ålhus (Wislands)	1/2 "



Surbeck (1902):

Aals auf der Oberfläche des Wassers ansammelt, wurde zur Heilung von Wunden gebraucht und soll, auf den Kopf geschmiert, „die kalköpf mit Haar beziere“

Das Fett, das sich beim Sieden eines

1893 New markets, new products

0.5 – 5 ton per fisher per year. Ten-thousands of fishers (?), 20000 tons, 80% smoked



-1900



1847-1893

80 °C

Hot-smoked



1980-

Filet



1858

1847 - Amsterdam slums
1858 - Steam train, at fairs
1893 - Commercialising
... 1940 - spreading

Doose (1908): "The eel, a cheap folk food in the past, has generally become a table fish, and smoked, it is a delicacy, which can only be obtained for expensive money"



~1881?



1907



1893

1900-1940 Stimulating commercial expansion

Muligheder for Aalefiske i Norges Ferskvand.



(Af Knut Dahl.)

1902

 AALEN

HVAD MAN VED OM DEN SAMT ANVISNING

PAA AT FORØGE UDBYTTET AF

AALEFISKERIET

1904

UNE RICHESSE TROP PEU EXPLOITÉE :



L'ANGUILLE D'AVALAISON

1924

UN ÉTRANGE POISSON :



L'ANGUILLE

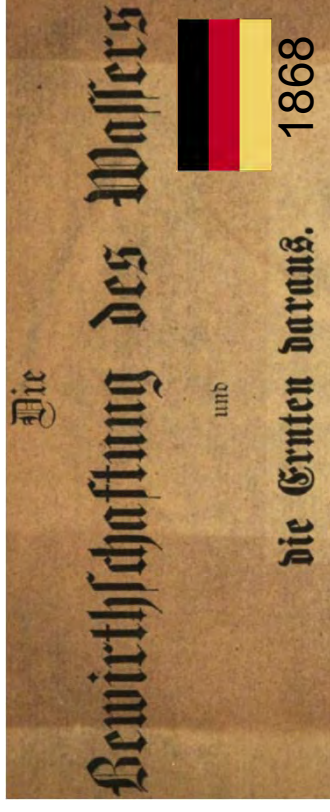
1931

SES MŒURS ET SON INTÉRÊT ÉCONOMIQUE

Lindemann 1881:

Binnen Kurzem wird der Aalfang doch eingeschränkt werden müssen, wenn der Aal in unsern Gewässern nicht ganz aufgefischt werden soll."

Soon, the eel fisheries will have to be restricted, if we want to avoid fishing out.



L'Anguille,



1908

Sa reproduction, ses migrations

et son intérêt économique en Belgique.

THE COMMON EEL, AND ITS CAPTURE; 1918

WITH SUGGESTIONS APPLICABLE TO SCOTLAND.

By W. L. CALDERWOOD, F.R.S.E.



LE FUMAGE DE L'ANGUILLE, INDUSTRIE POSSIBLE
DANS LES PAYS MÉDITERRANÉENS



1931

Lindemann 1881:

Binnen Kurzem wird der Aalfang doch eingeschränkt werden müssen, wenn der Aal in unsern Gewässern nicht ganz aufgefischt werden soll."

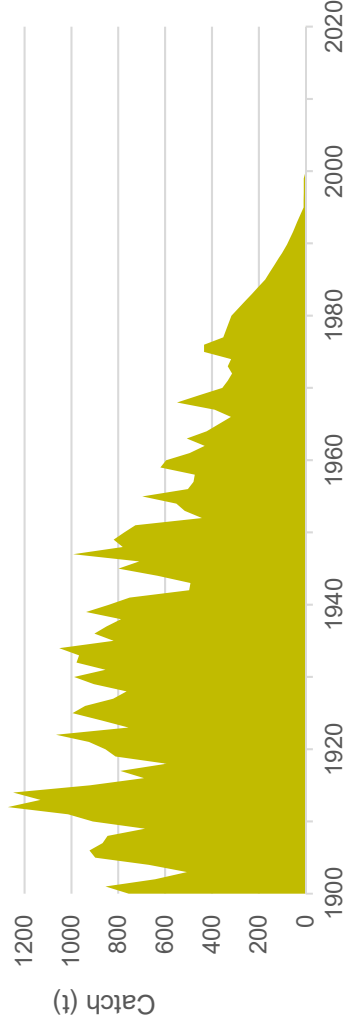
Soon, the eel fisheries will have to be restricted, if we want to avoid fishing out.

Early, slow decline

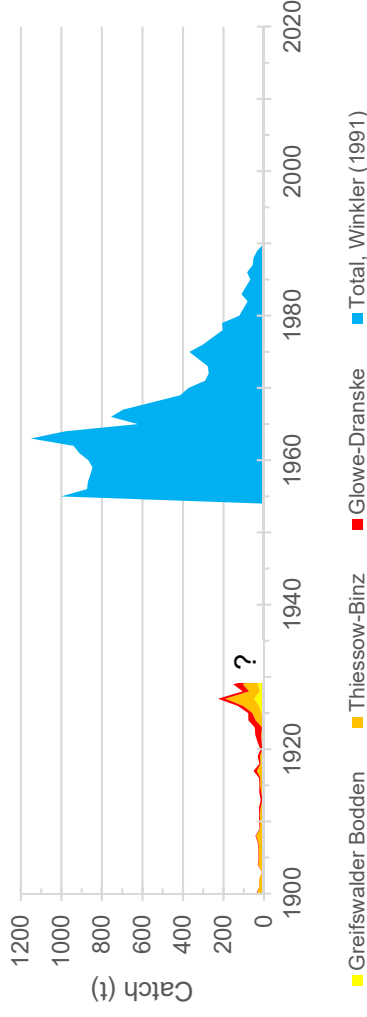


“EU market” = 80% smoked

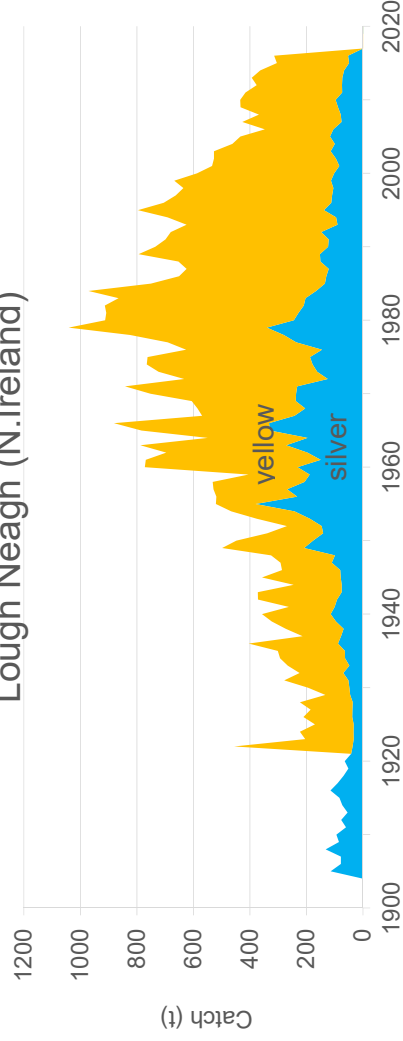
Limfjord (Denmark)



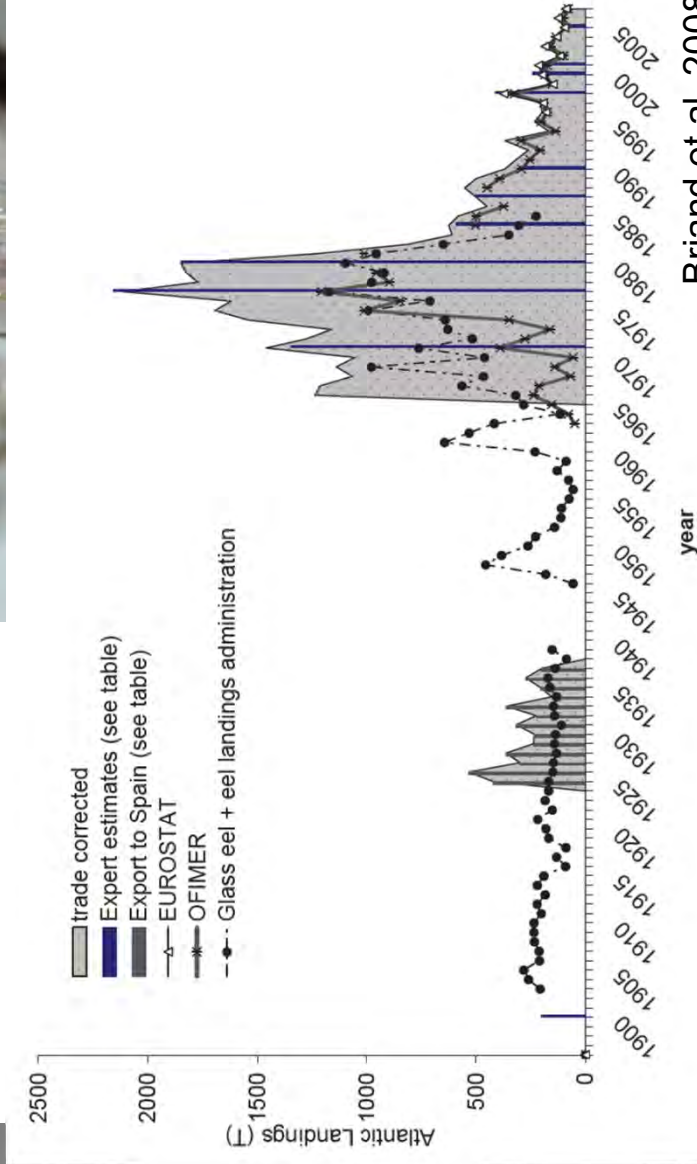
Island Rügen (Germany)



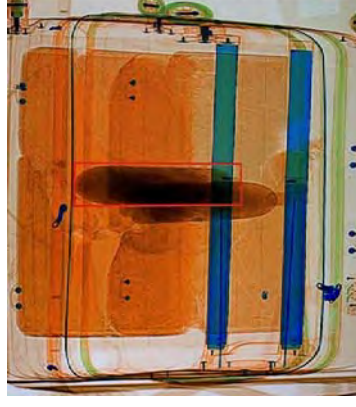
Lough Neagh (N.Ireland)



Glass eel exploitation



Briand et al, 2008



Horse cart, automobile & airplane

- 1900



Subsistence
fisheries



Recreational,
Poaching

1900 -



Commercial
fisheries

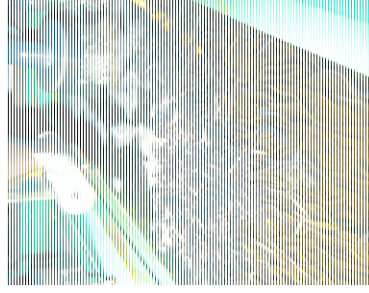


Cultural
heritage

~ 1980 ~



Aquaculture



Current
market

When?



Artificial
reproduction



“Invest in future”
“Coming soon”

Management of the stock

Until Eel Regulation:

European Economic Area: sharing knowledge, one market

Splendid isolation: all for themselves - Omnes pro ipsis

Fisheries adapting to growing non-fishing impacts, overfishing

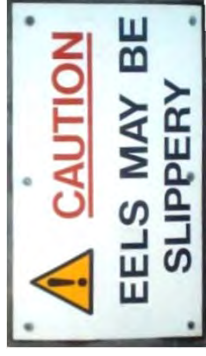
1854 Anonymous

1879 Millet

1933 Röhler

1967 Meyer-Waarden

2003 Dekker et al.



Since Eel Regulation:

Collective action, coordinated

Orchestration, feedback

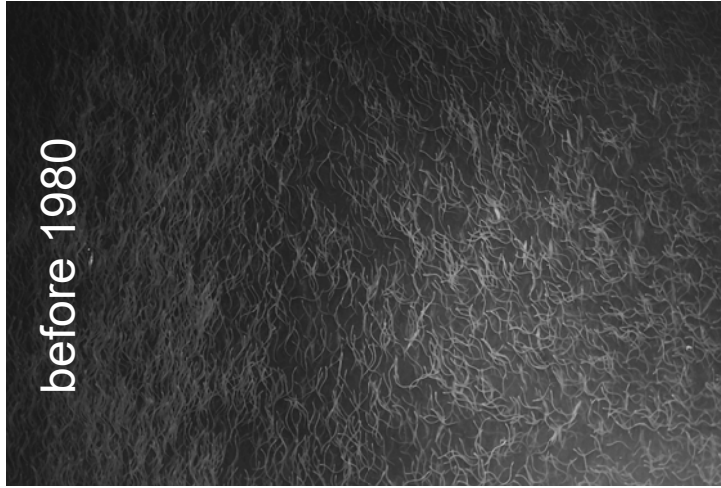
- Scientific advice, no ivory tower
- Long-term targets → short-term limits
40 % biomass → 40+ % survival
- Address non-fishing impacts more



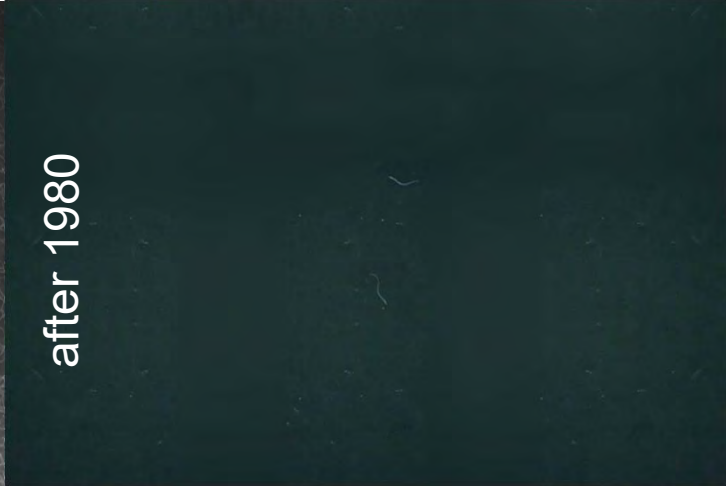
Collective Action

Awkward Drifting

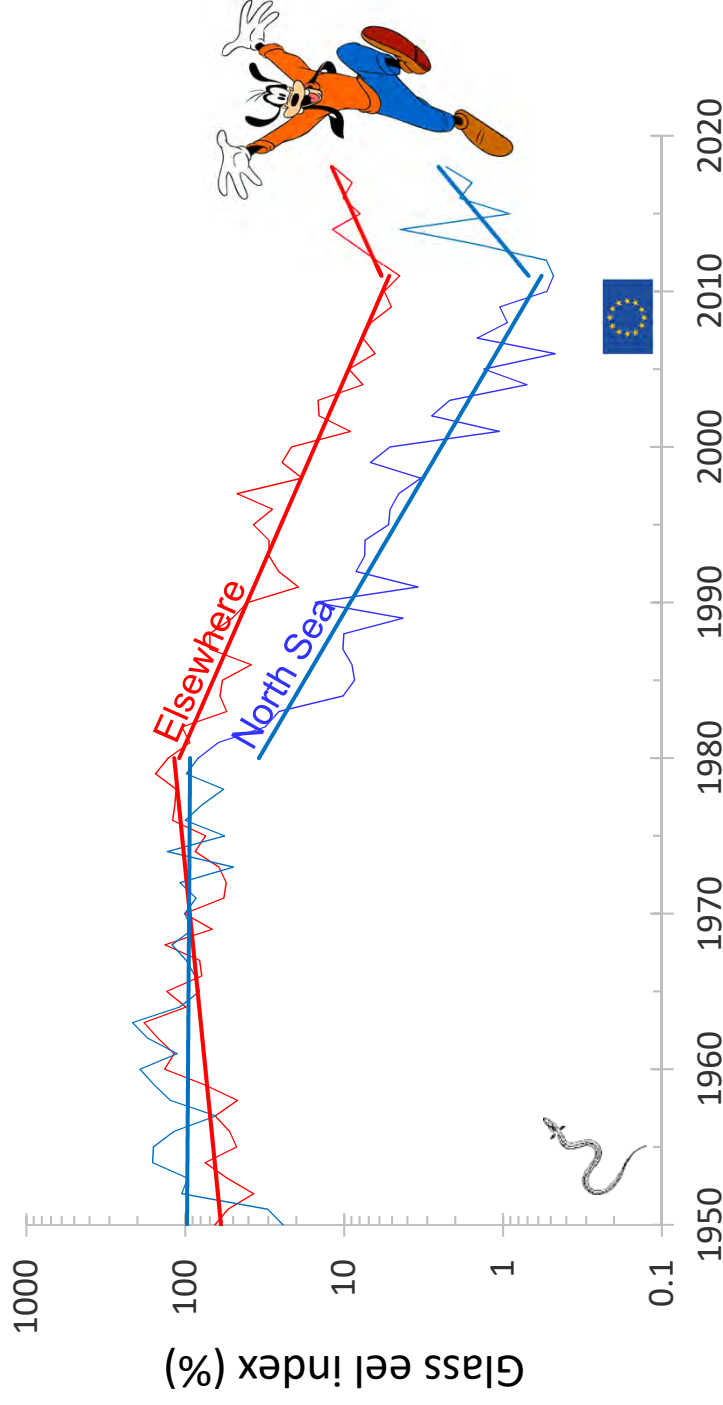
before 1980



after 1980



2011 – a turning point?



Expectations: 2011 earliest & speed down $\approx$ up

The most optimistic expectations came true.

With all vinegarish reservations one can make, of course.

Can we stop protecting? No, it is time to press-on.

Eel, the eurofish



Eel is a luxury product – fishery on a stock in decline.

Overwhelming non-fishing impacts, high economic interests.
150 years of fragmented management, all over Europe.



The Eel Regulation established unity in our diversity.
European coordination (not patronage) is key to success.
Success, press-on, do not risk losing the gains.

Alarm about eel has been noticed.
150-year dead-lock broken, all over Europe.
“Slipping through our hands” – not anymore!

