

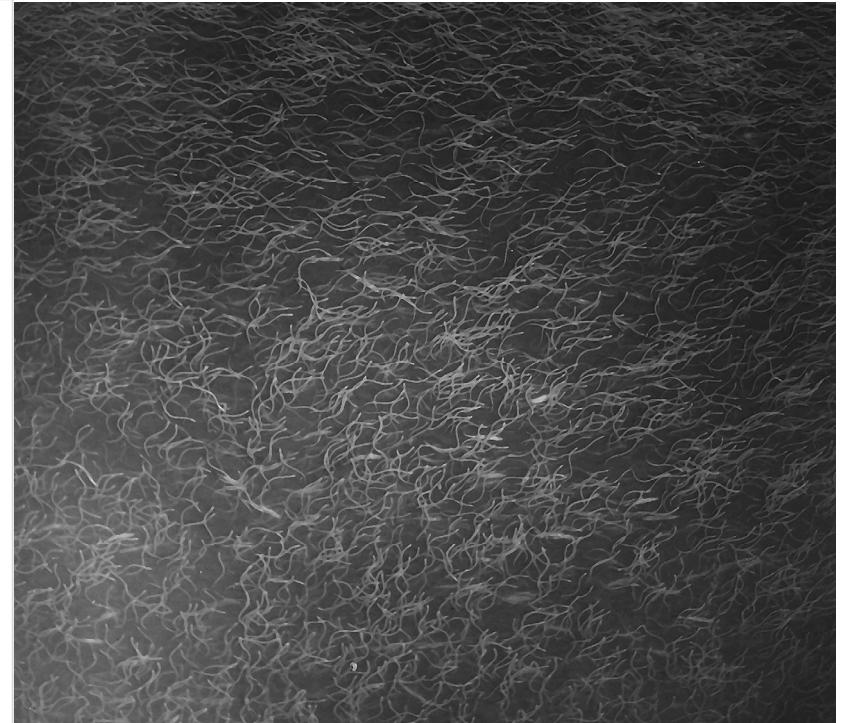
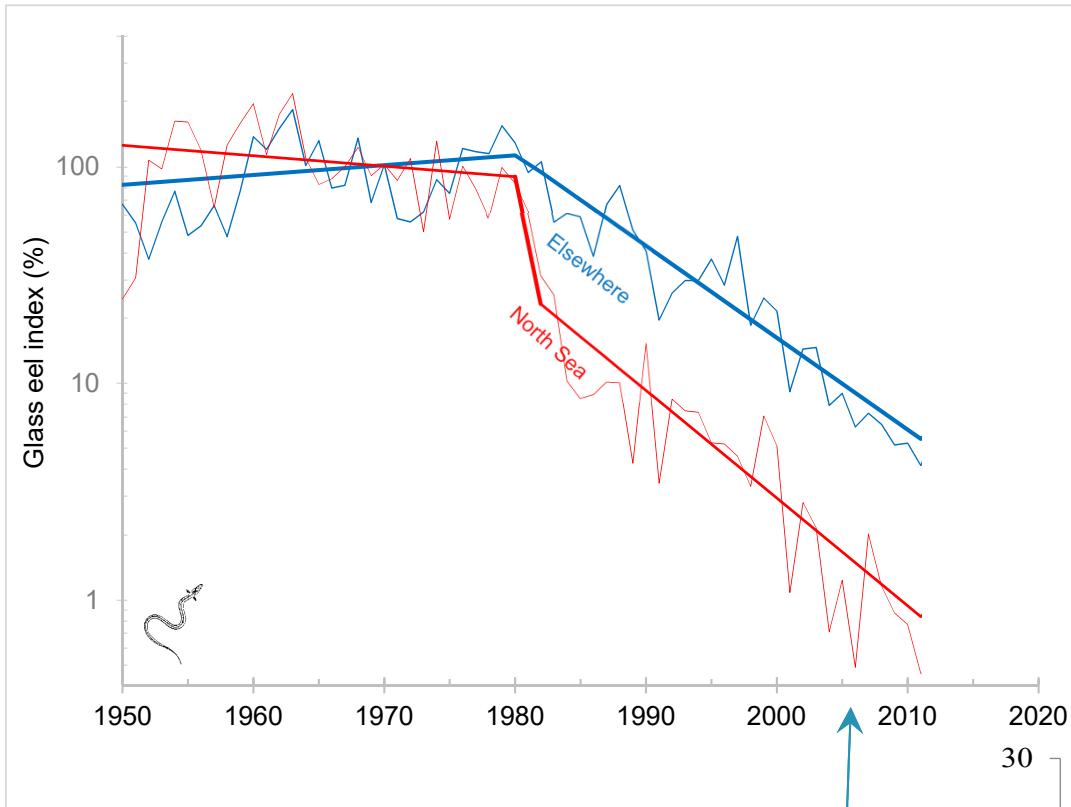
Hur ser situationen för ålen ut idag?



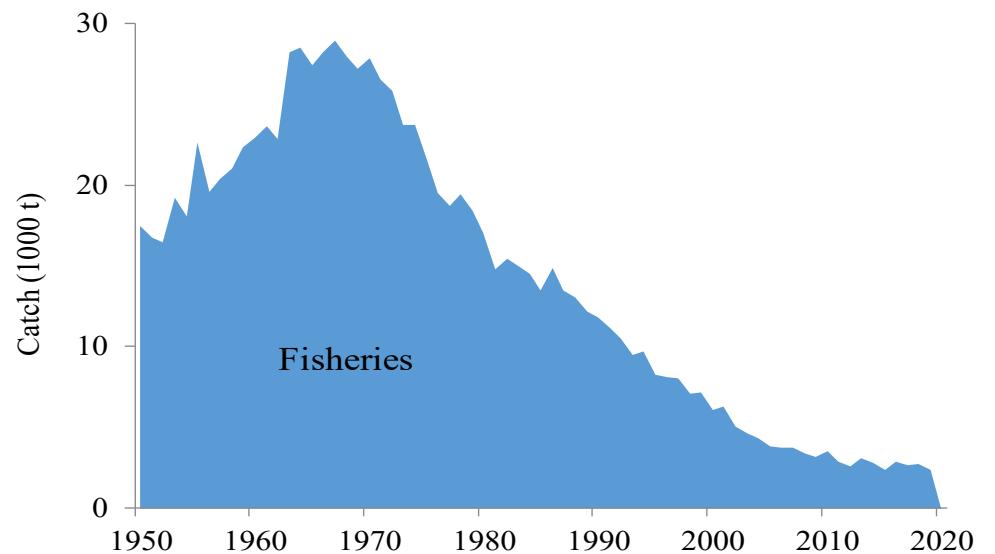
Willem.Dekker@SLU.SE

Jacob van Maerlant (ca. 1235-1300),
Der NATUREN Bloeme. "Borloca"

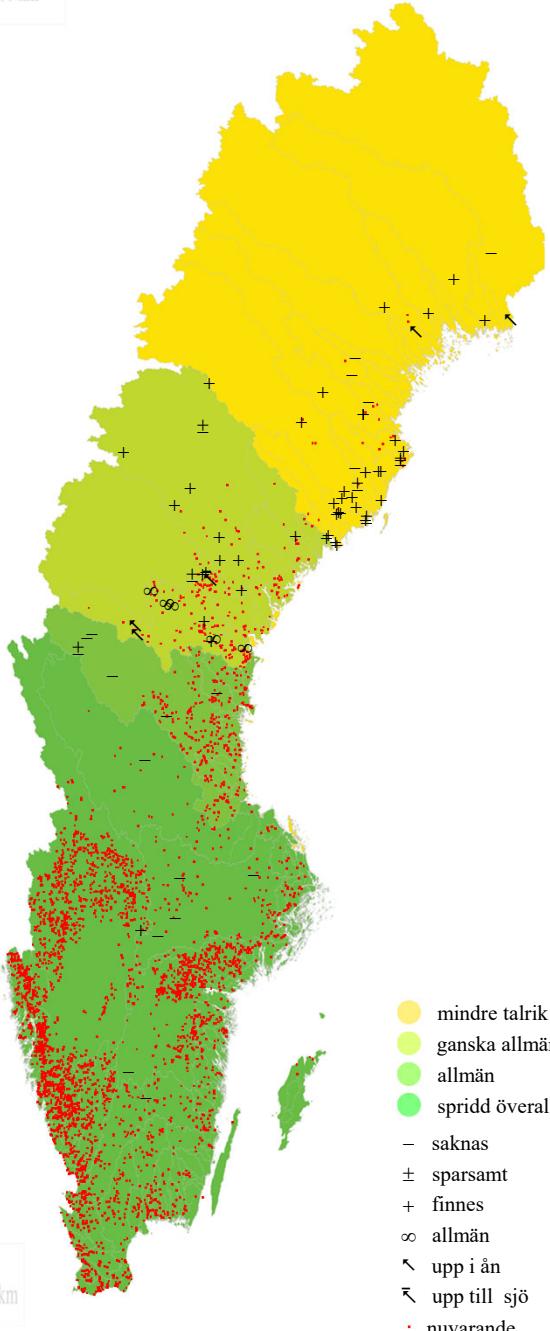
The Problem with the Eel



Anonymous 2007 Council Regulation (EC)
No 1100/2007 of 18 September 2007
establishing measures for the recovery
of the stock of European eel.



100 km



Historical distribution in Sweden



Lundberg 1899 Om Svenska Insjofiskarnas Utbredning.
Stockholm, Kungliga hofboktryckeriet iduns tryckeri
aktiebolag, 132 pp.

Our reconstruction method

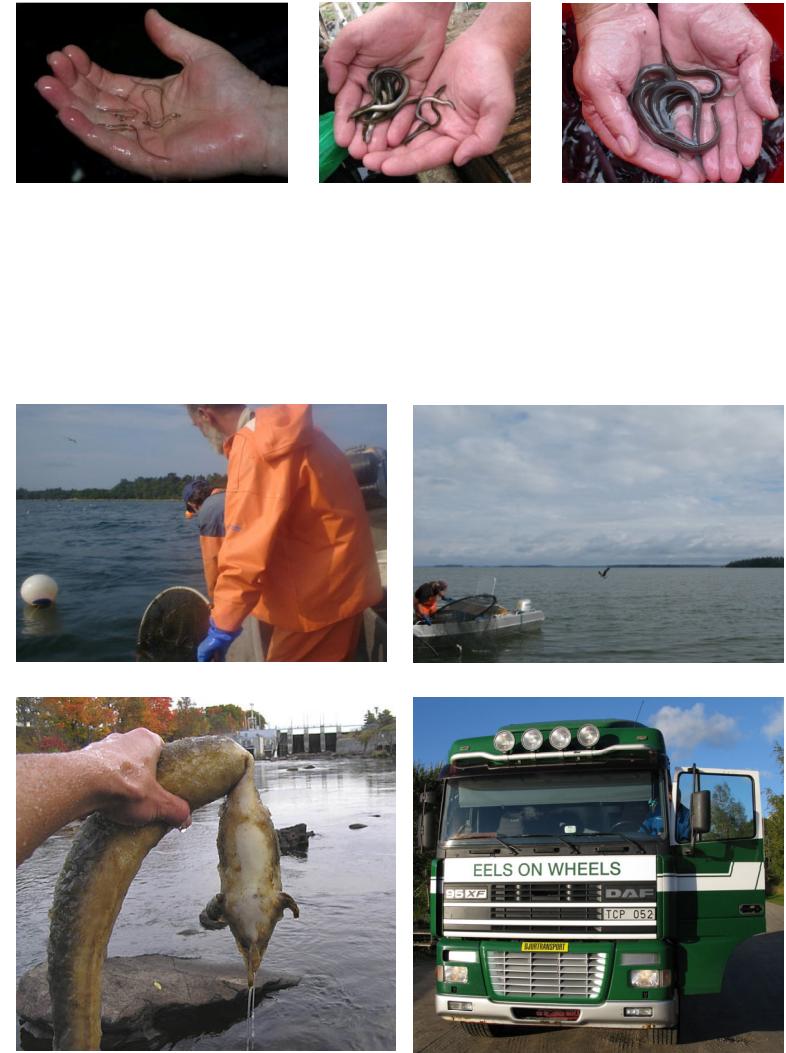
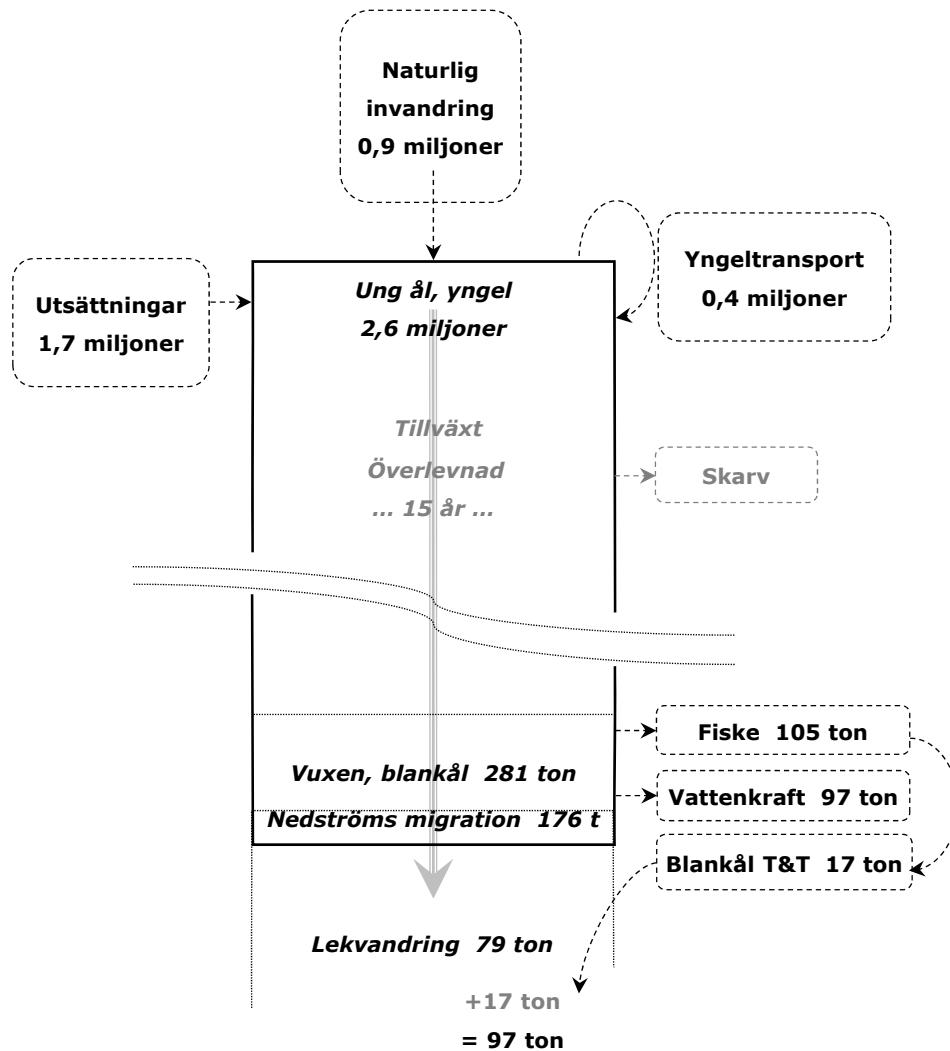
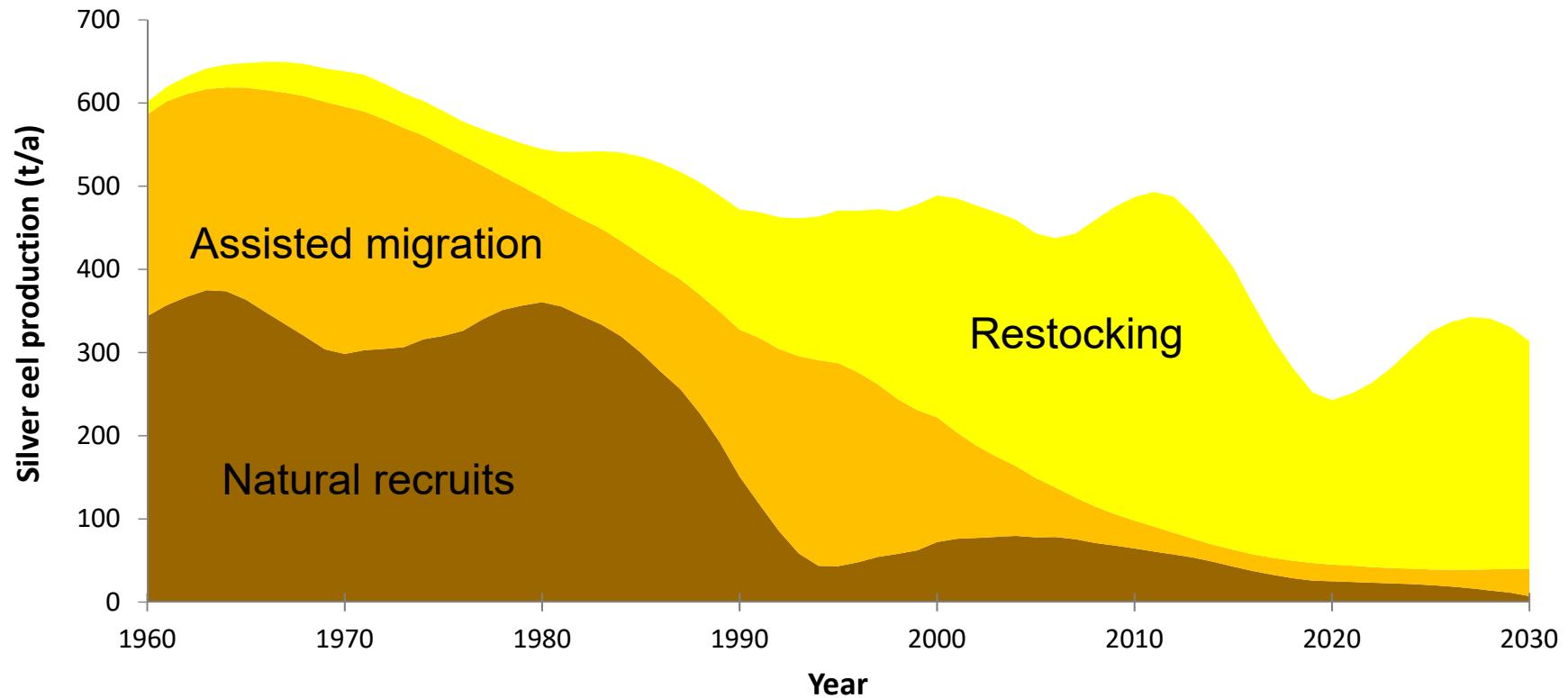


Diagram from Dekker & Wickström (2015) KTÅ rapport 2015:103

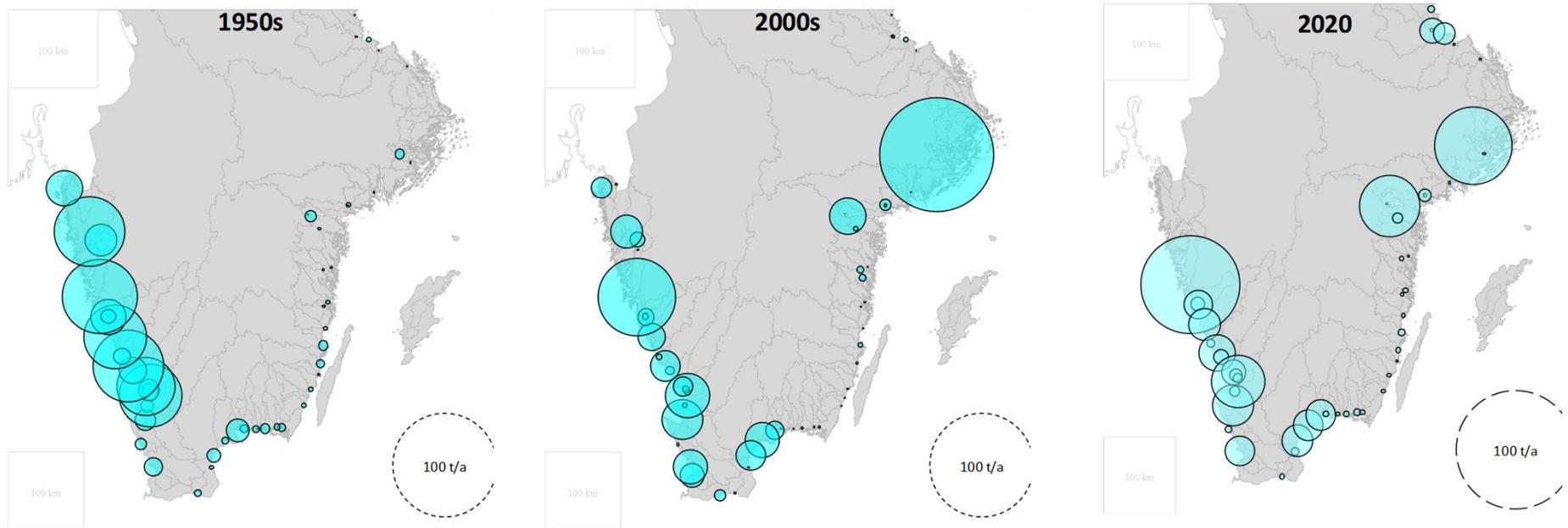
Silver eel production trends



Natural stock very low, complemented by restocking. Restocking \approx all.

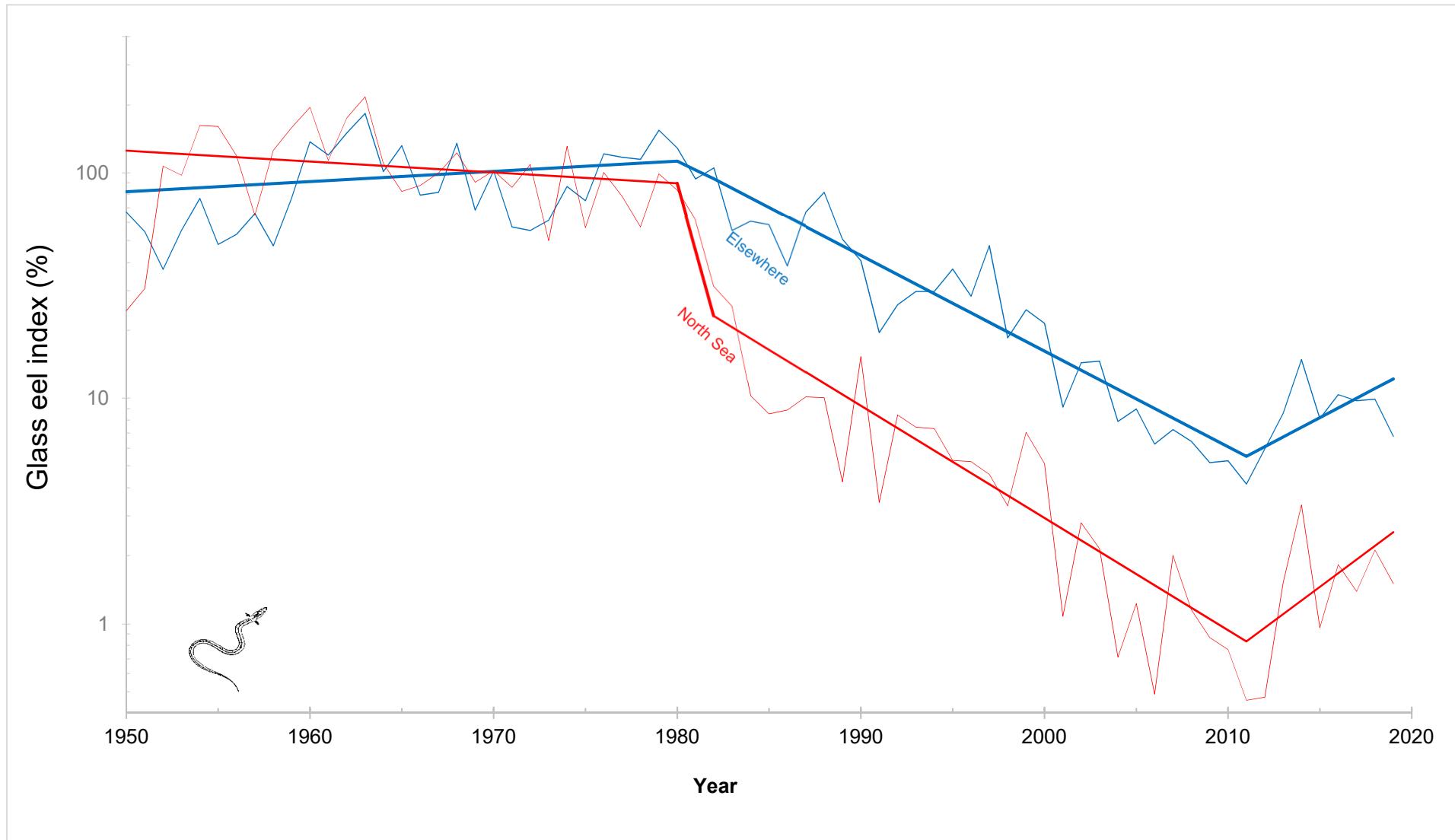
Shown is the silver eel production, in the year they become silver - not in their recruitment year.

Silver eel production per river



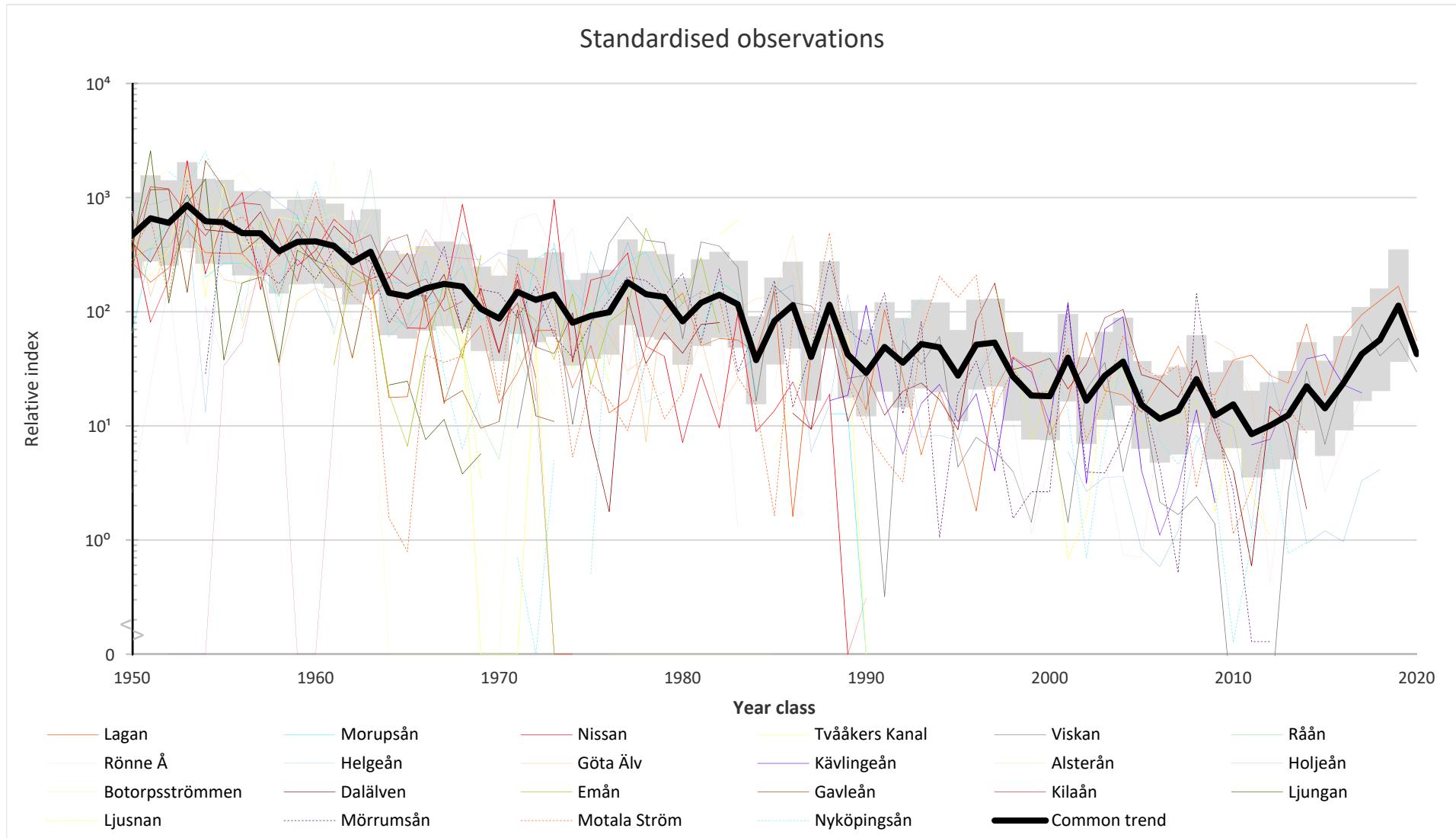
Restocking affects the spatial distribution (e.g. Mälaren), long delays

Time trend in eel recruitment



The times are changing for the better, also in Sweden!

Time trend in eel recruitment



The times are changing for the better, also in Sweden!

Stabilt – Hållbart - Återhämtning

EU Eel Regulation 2007: reduce anthropogenic mortalities so as to permit ...
the escapement ... of at least 40 % of the [pristine] silver eel.

Swedish AFP: *The present recruitment decline is stopped or an increase.*

Aim:

40% B → 100% R → 100% B → 40% B
↓ 60% catch + kill

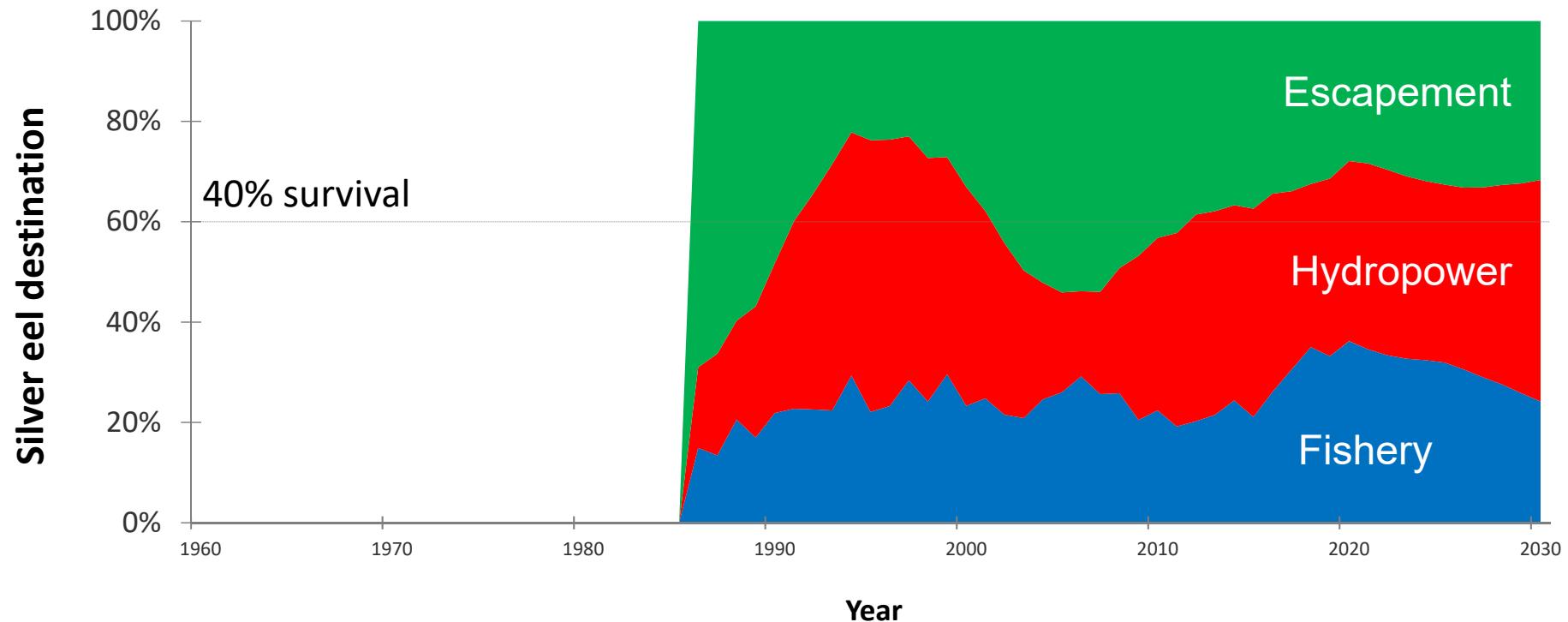
Actual:

4% B → 10% R → 10% B → 4% B
↓ 6% catch + kill

Status=low - so focus on: recovery, mortality, percentages, (trends)

B=Blankål, R=Rekryter

Impacts and escapement



Results vary over the years, mostly due to restocking locations shifting around. Survival and escapement is below 40%, and will remain so for several years more. Survival < 40% - the inland stock in Sweden does not contribute to the recovery.

Hur ser situationen för ålen ut idag?

- a. The eel stock across Europe is at a historical minimum
- b. Since 2007, the EU Eel Regulation is implemented
- c. After thirty years of decline, recruitment is beginning to rise
- d. Restocking, fishery and hydropower are the main impacts
- e. Survival in our inland waters is too low – not allowing recovery



Dekker W., van Gemert R., Bryhn A., Sjöberg N. & Wickström H. (in prep.) Assessment of the eel stock in Sweden, spring 2021 – Fourth post-evaluation of the Swedish eel management. Aqua Reports 2021:xx
(available on-line early July 2021)