



University of
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Amherst

Session E2: Cross Border Practical and Applied Experiences with Germany; the Alosa Alosa LIFE(+) Project

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Cross border practical and applied experiences with Germany; the Alosa Alosa LIFE(+) project.

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**A. Scharbert,
Rheinischer Fischereiverband von 1880 e.V.**



Germany: Maifisch
English: Allis shad
Dutch: Elft or Meivis
French: Grand alose



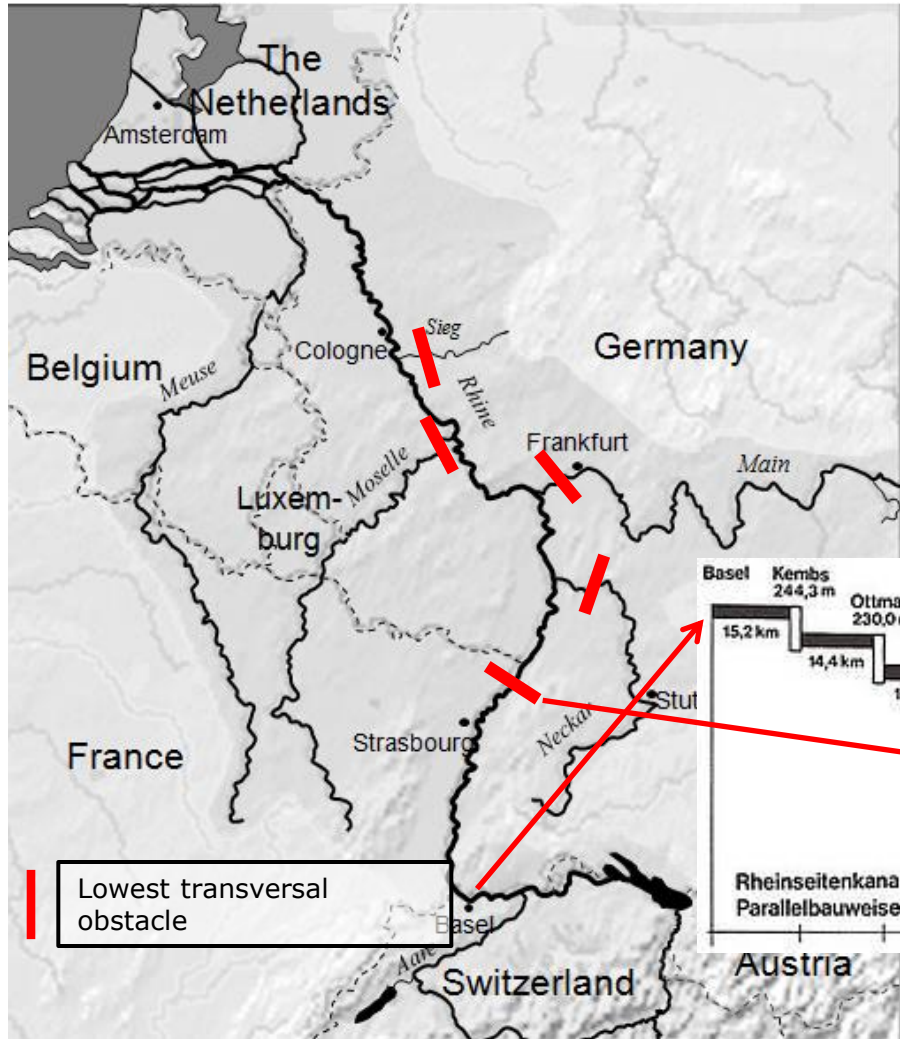
Latin: *Alosa alosa*

Family Clupeidae

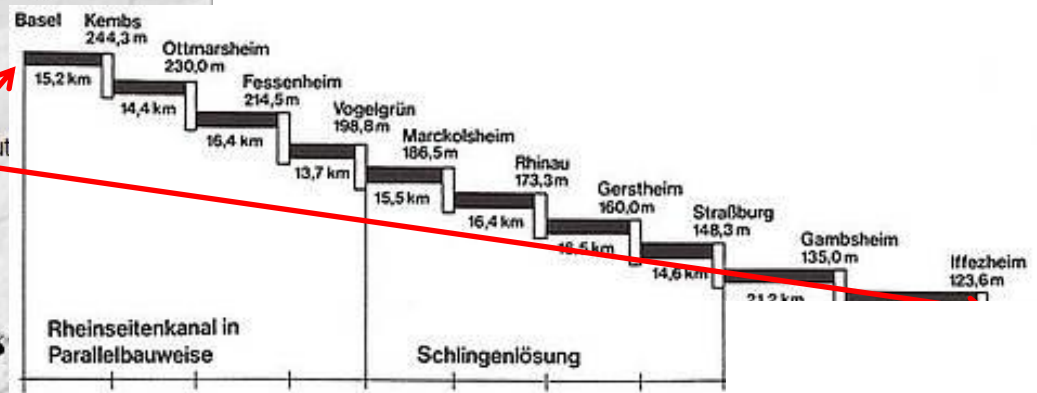
Length: ~60 cm

weight: ~3 kg

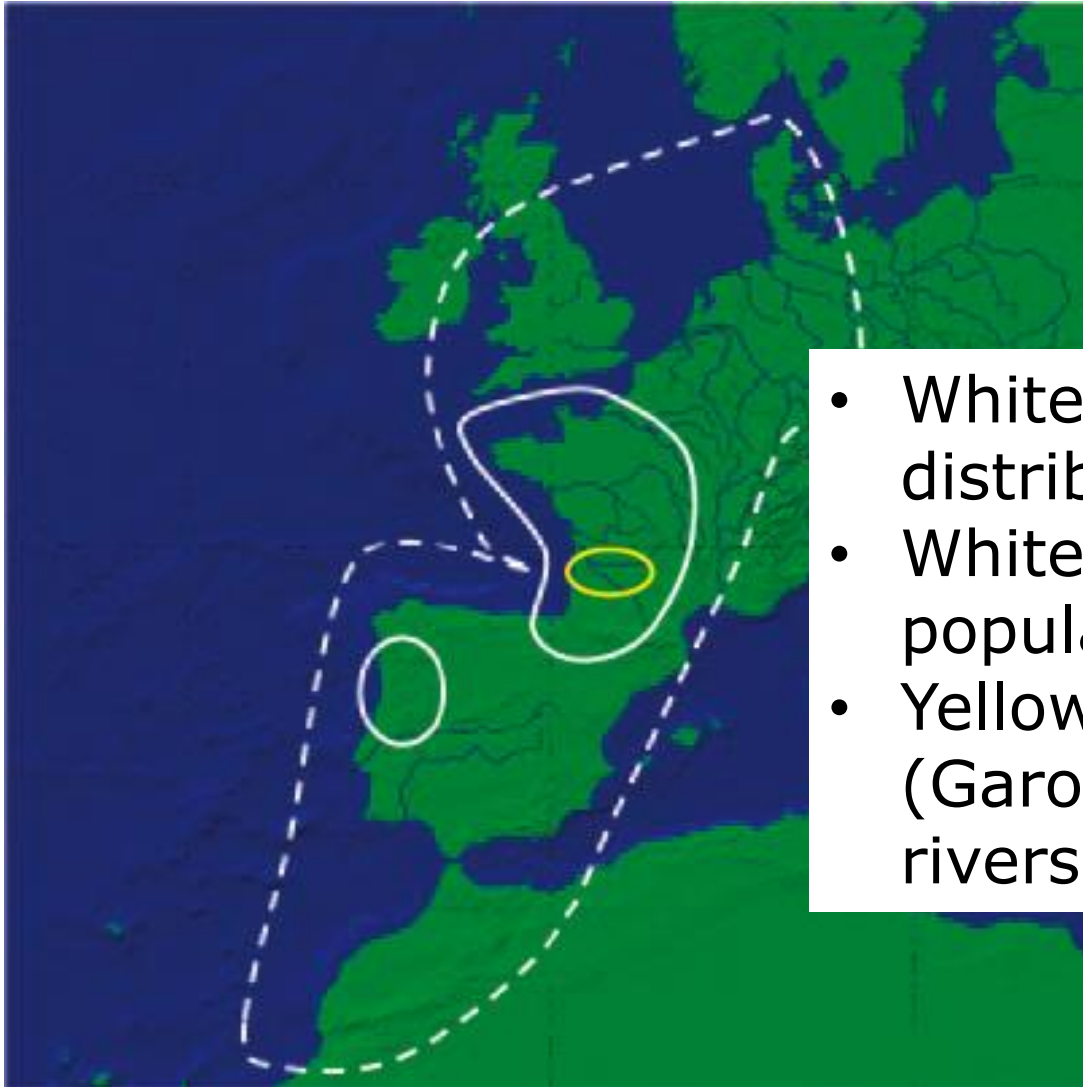
The Rhine



- Catchment: 218,000 km²
- Mean discharge: 2,300 m³ s⁻¹
- Length: 1,240 km
- Free flowing stretch ~700 km (Iffezheim)



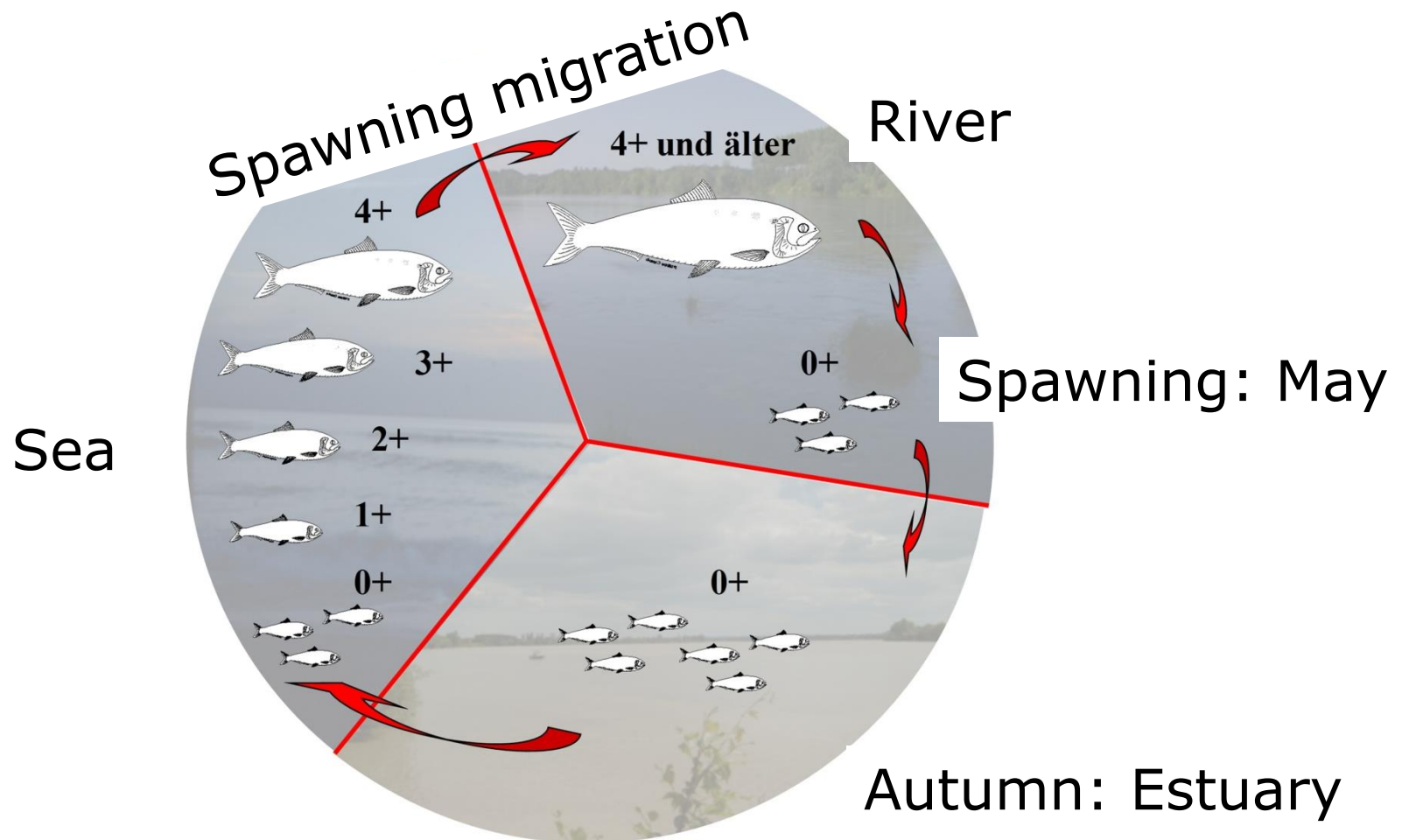
Status



- White dotted line: Historic distribution area
- White solid line: small relict populations
- Yellow line: Gironde estuary (Garonne and Dordogne rivers) population > 100.000



Life cycle of Allis shad



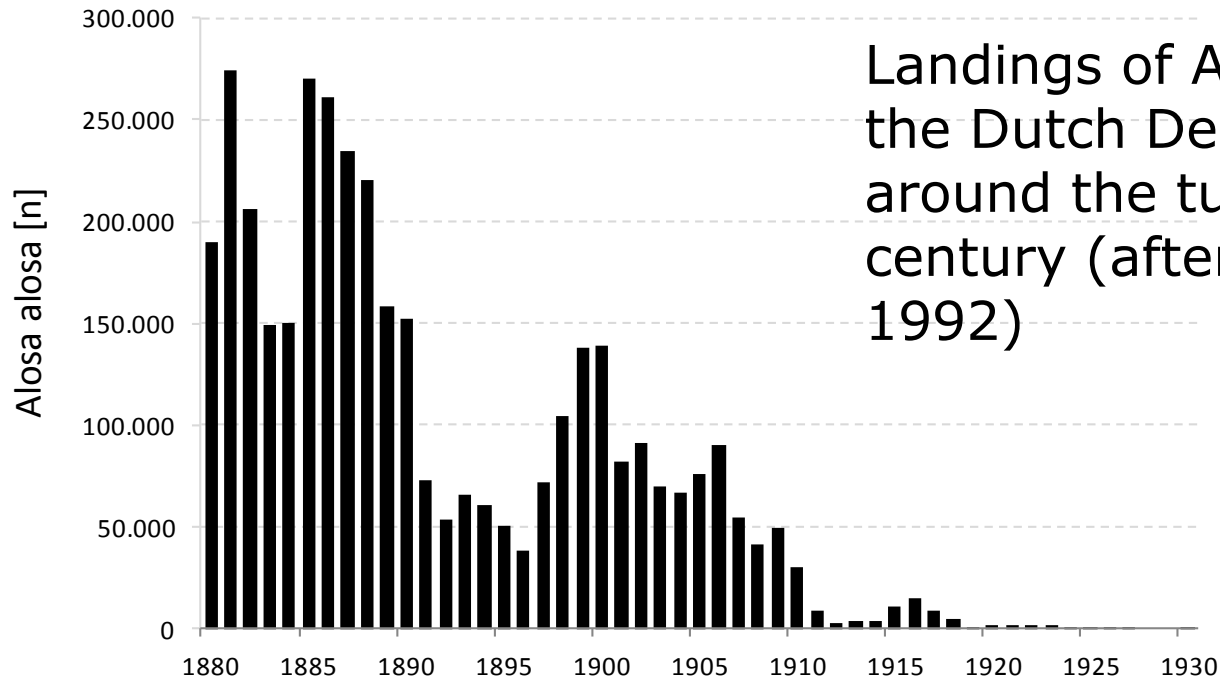
Allis shad in Germany/ Netherlands



Getuigenissen van de vroegere populatieomvang van de elften en van het grote economische belang van de elftenvangst op de Rijn: Krantenadvertentie uit de Düsseldorfer Generalanzeiger van 1904, die de lezer toen attendeerde op de verkoop van verse elften in de lokale cafés en restaurants en het schilderij "Elftenmarkt in Düsseldorf" van Fr. Schnitzler.



History of Allis shad in Germany & Netherlands



Decline:

- River corrections, weirs
- Pollution
- Fisheries



Initial phase of the project in Germany

Before 2007 several studies have been conducted to see if there is enough spawning area, good circumstances (e.g. flow and waves caused by boats), fish handling, decrease egg mortality



Initial phase of the project in Germany

Allis shad is extreme vulnerable to handling, so special care is taken when handling is needed.

Storage of fish in round basins

Anaesthetize fish

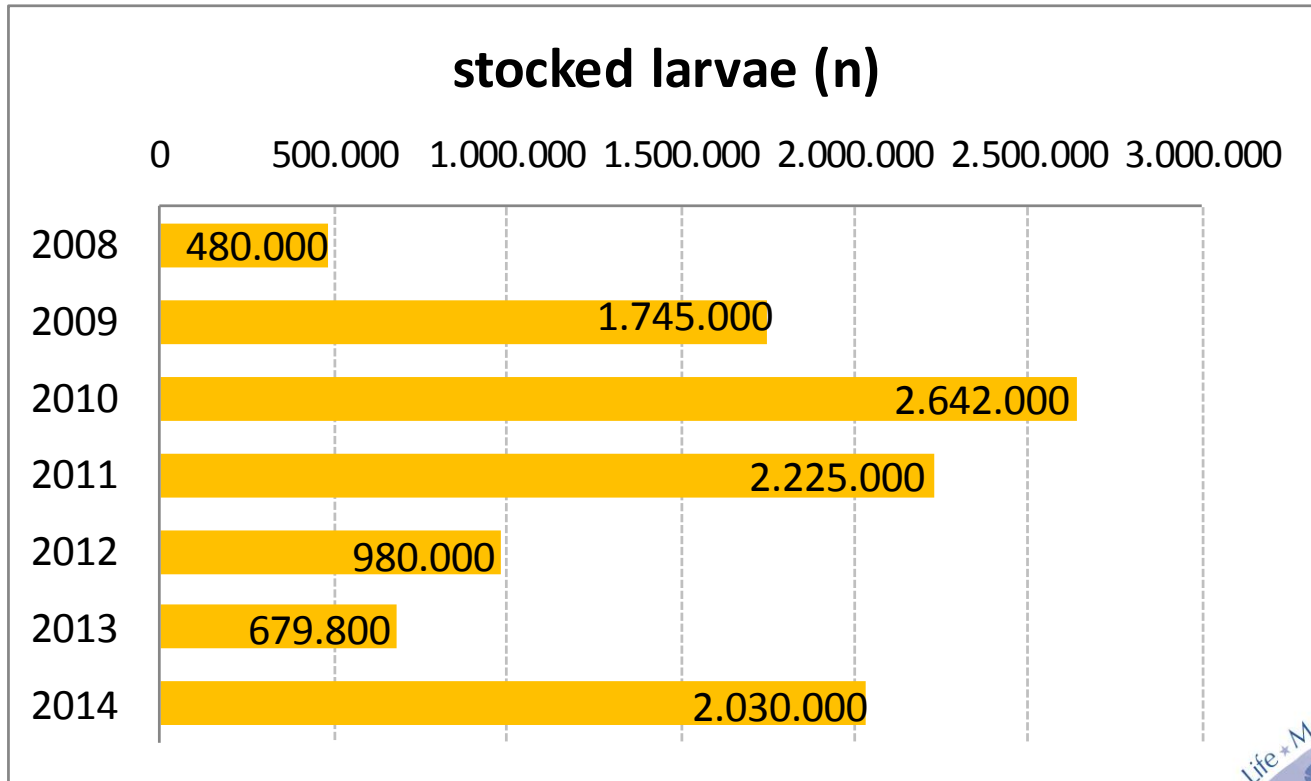
Experience from France (IRSTEA & MIGADO), USA



Start of the project



Start of the project



Continuing

Waiting for returners in 2013-2014?

Best of Best EU LIFE Nature Project 2011

Life+ project could continue until end of 2015

In the meantime a small hatchery was build in Germany: ex situ population.



Hatchery



Successstory?



Successstory?



Successstory?



Successory?

Observations at the fish passage Iffezheim

Observations of dead fish

One caught by an angler.

Monitoring is difficult



Successory?

In 2014, the first year after a 4 to 5 years sea period, hundreds (minimum 341) of allis shad have been recorded returning to the Rhine system for spawning. French fisherman caught 3 adults with gill nets near Dutch-German border.

In order to form the basis for a future allis shad stock in the Rhine, and to develop a natural stock in the long term, monitoring will be continued until at least 2015.

After 2015 it seems that stocking is also needed to maintain a self-sustaining population.

Successory

- Increased linear connectivity of the river (fish passage at Iffezheim) was an important factor according to American research.
- Increased water quality
- Allis shad from Gironde was a good donor population (genetic not different from Rhine)
- IRSTEA had skills for reproduction and recovering adult fish.
- MIGADO has built a hatchery and developed mass breeding opportunities to enable a stocking programme on the Rhine
- From USA/France experience it was estimated that 200-500 larvae were needed to get 1 returner, mass stocking in the first years was needed.

Successory

- Global heating (warmer Rhine) is in favour of the Allis shad.
- Substrate (gravel donation downstream of Iffezheim) and habitat conditions in the Rhine's free-flowing stretch seem to promote natural reproduction of shad returnees
- Allis shad was one of the last river migratory fish that disappeared, so most likely that it will return as first species.
- Houting (*Coregonus oxyrinchus*) was also successful after reintroduction in the Rhine (last disappeared), salmon is more problematic

Project management

Profile



Coordinating beneficiary:

Landesamt für Natur,
Umwelt und Verbraucherschutz
Nordrhein-Westfalen



Duration: 2011-2015

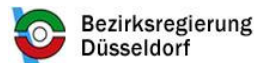
Budget : 1.605.827 €

EU-share: 749.414 € (49,16 %)

Associated beneficiaries and co-financers:



Hessisches Ministerium für
Umwelt,
Energie, Landwirtschaft und
Verbraucherschutz





Thank you very much for your attention!

