

Jun 20th, 3:10 PM - 3:30 PM

# Fatal attraction of freshwater flows: migration of glass eel (*Anguilla Anguilla* L.) from sea to inland waters

Rob Kroes  
*University of Amsterdam*

Emiel van Loon  
*University of Amsterdam*

Harm van der Geest  
*University of Amsterdam*

Edo Goverse  
*University of Amsterdam, RAVON*

Martijn Scheephouwer  
*RAVON, Nijmegen Reptile, Amphibians and Fish Conservation Netherlands*

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# Fatal attraction of freshwater flows:

migration of glass eel (*Anguilla Anguilla* L.) from sea to inland waters

## Rob Kroes<sup>1</sup>

Emiel van Loon<sup>1</sup>

Harm van der Geest<sup>1</sup>

Edo Goverse<sup>1,2</sup>

Martijn Scheephouwer<sup>2</sup>

<sup>1</sup> University of Amsterdam  
Department of Freshwater and  
Marine Ecology

<sup>2</sup> RAVON, Nijmegen  
Reptile, Amphibians and Fish  
Conservation Netherlands



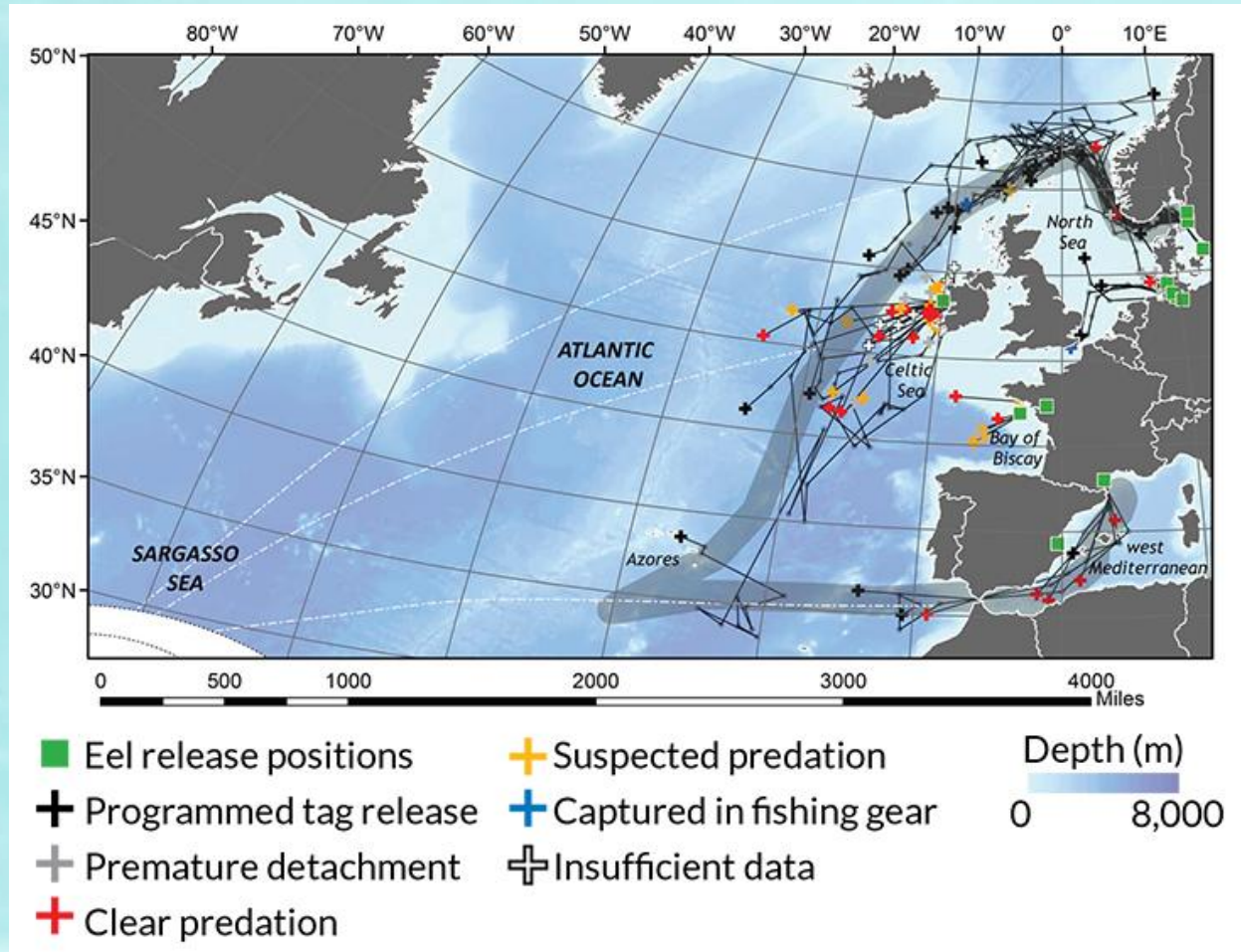
# Eel riot of Amsterdam (1886)



Eel pulling



# Eel migration



Righton et. al (2016)





## Fatal attraction of freshwater flows:

How do water pumping stations affect migration of glass eel from sea to inland waters?

Glass eels



Pumping station



# Study location: North Sea Canal



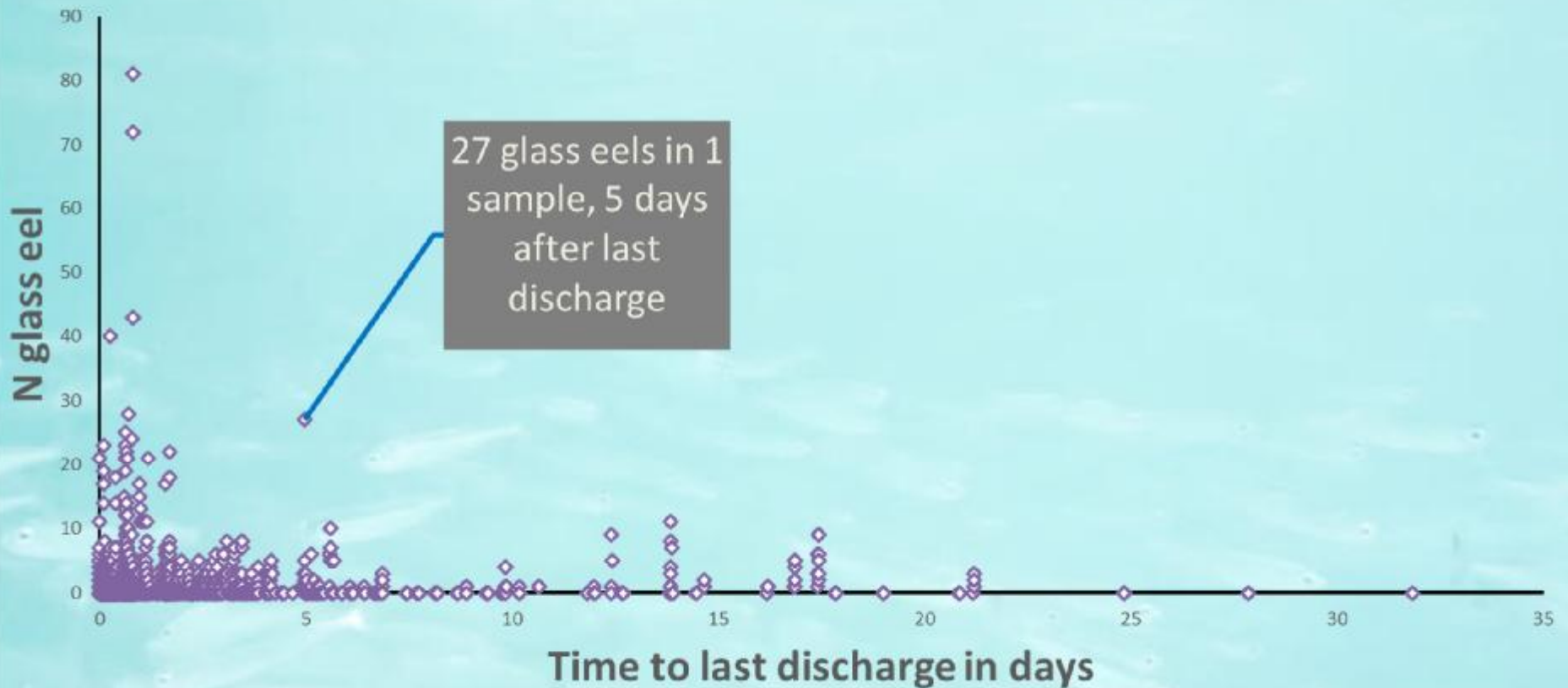


# Methods

- Square net sampling
- 11 pumping stations with usable discharge data
- 2014 – 2015 – 2016
- Early March – Late June
- 5 samples in 30 minutes
- 2 times a week 1/2h after sunset



# Results: Do pumping stations attract glass eel?



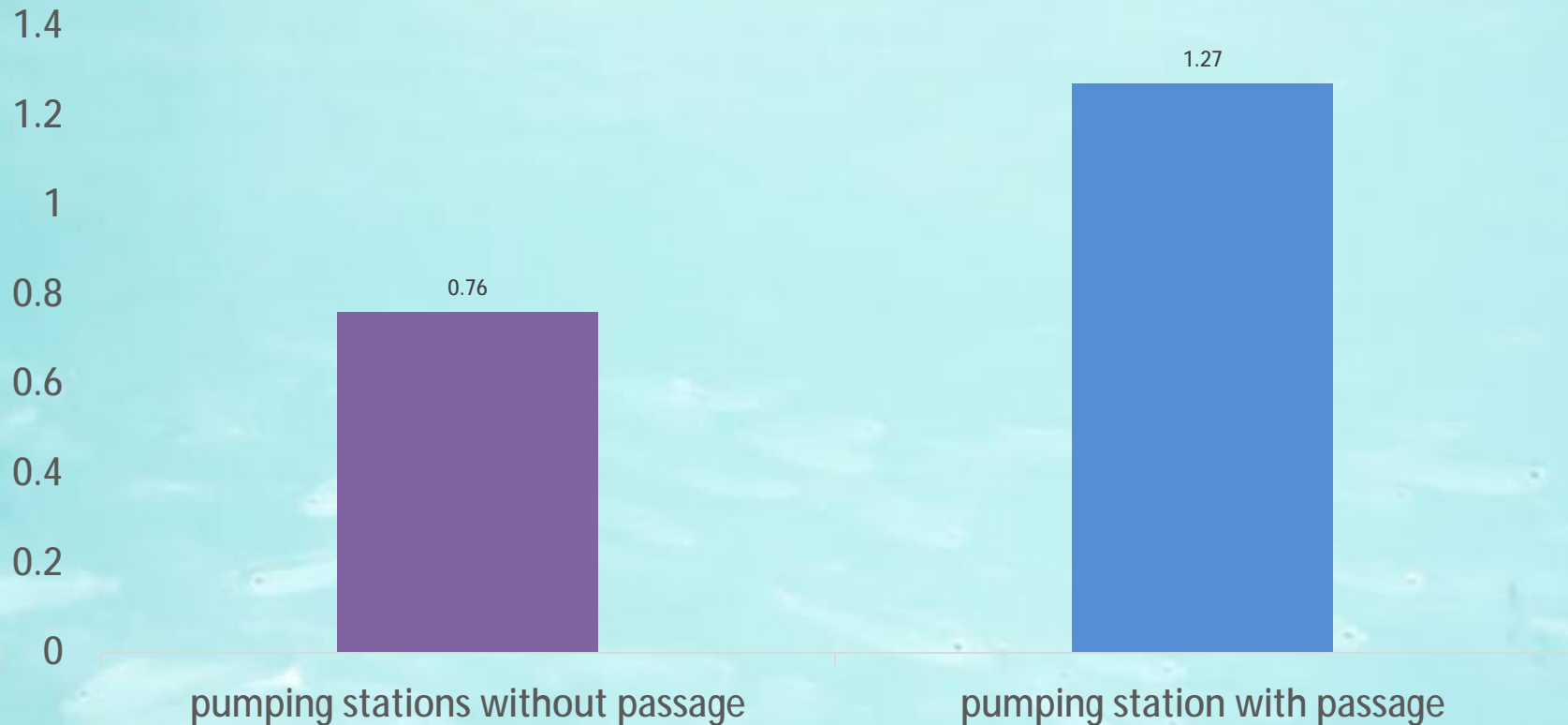


# Results: Focused on a day after last discharge

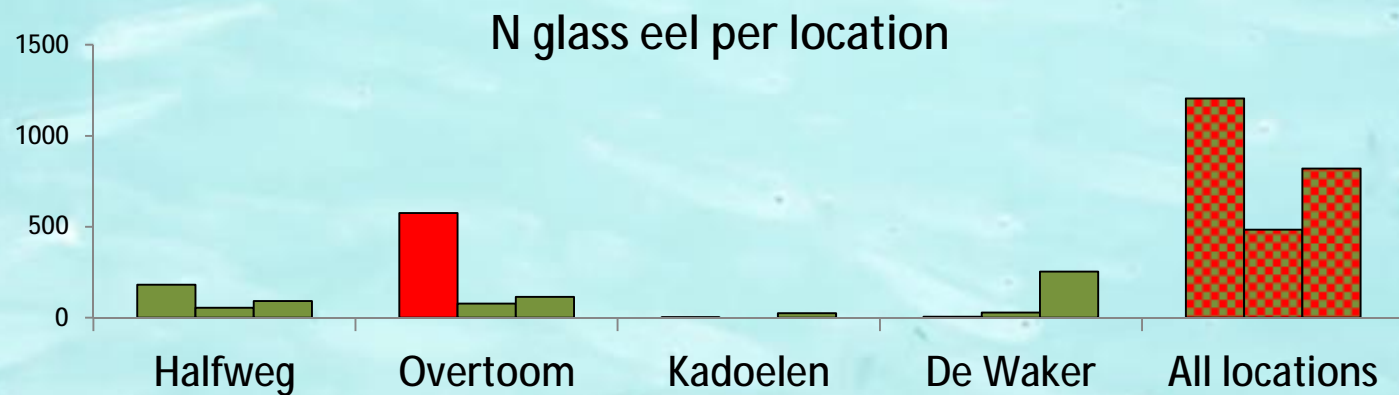
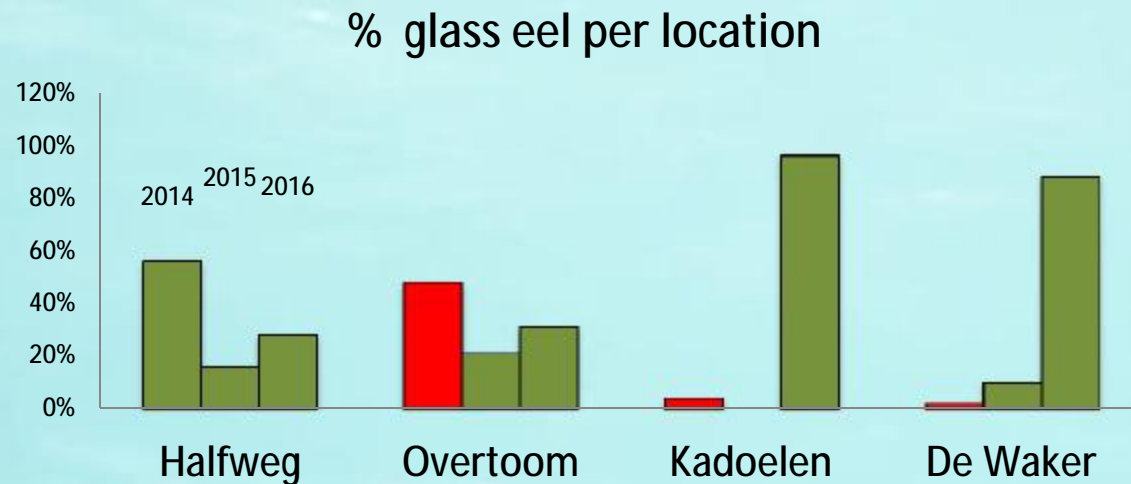


# Results: Do glass eel discriminate for pumping stations with fish passage?

mean (N glass eels per sample)



# Results: Do new fish passages attract glass eel?



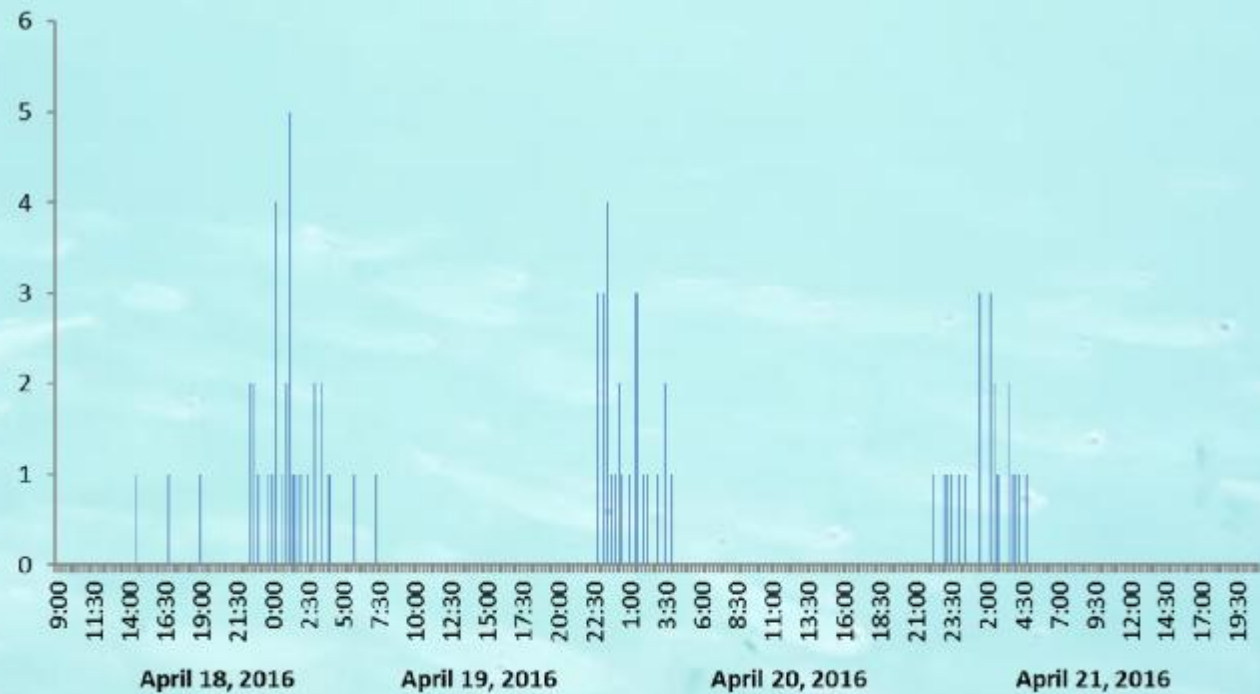


# Discussion

- Water temperature?
- Time of year?
- Chemotaxis?
- Square net sampling?
- Sample time?

- 84h monitoring

N glass eel 'Overtoom'



# Take Home Message: Fatal attraction?

- Glass eel discriminate for fish passages
- Substantial part do swim to wrong places
- Periodic freshwater flows do not attract glass eels
- Who will invent the Glass Eel Transponder?



Thank you!

