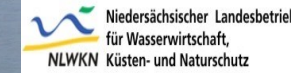


Swimway Vecht



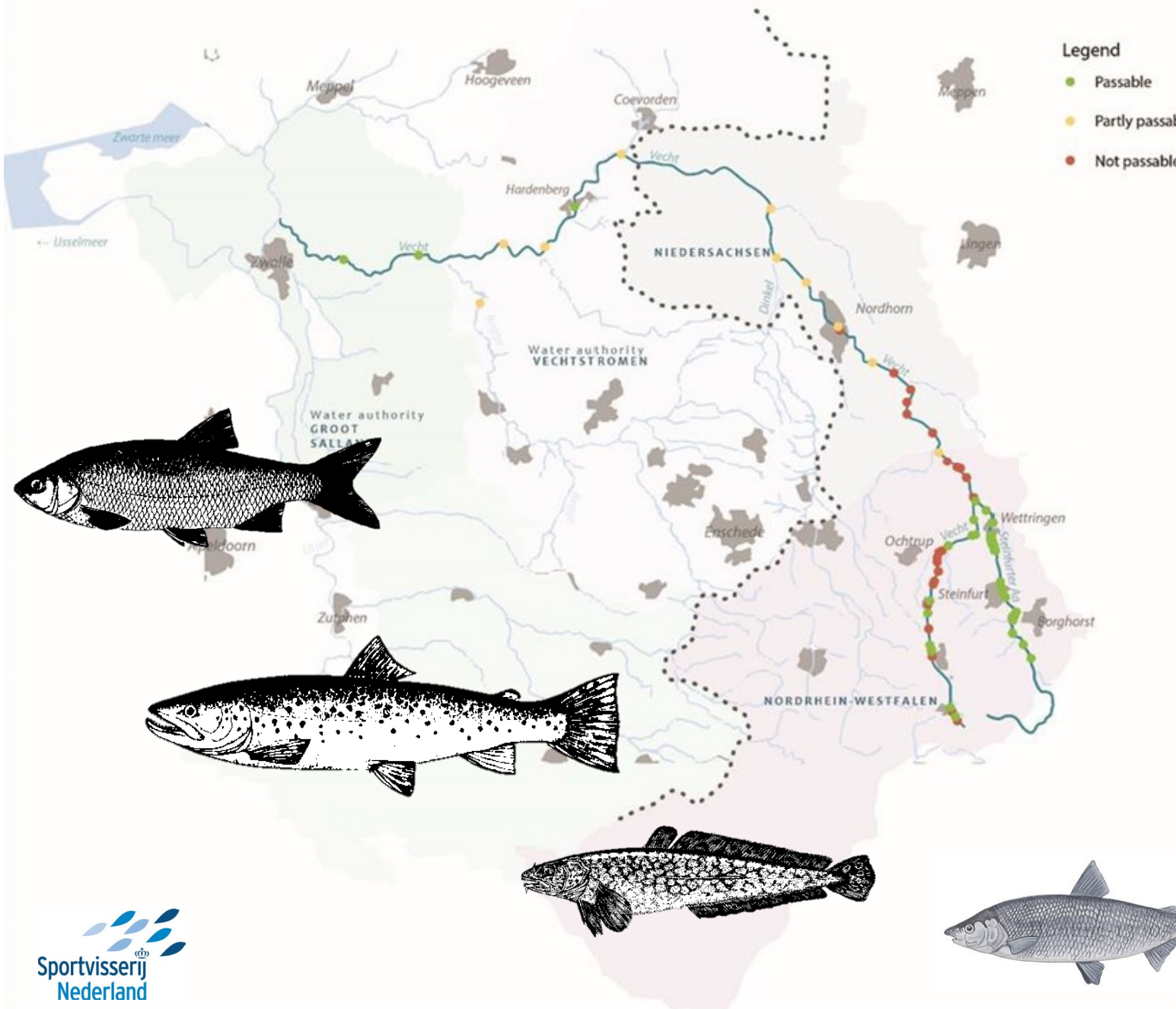
Bezirksregierung Münster



Remko Verspui & Jan Kamman

16 april 2024





- Legend
- Passable
 - Partly passabl
 - Not passable



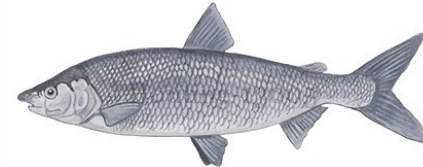
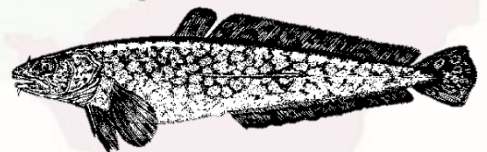
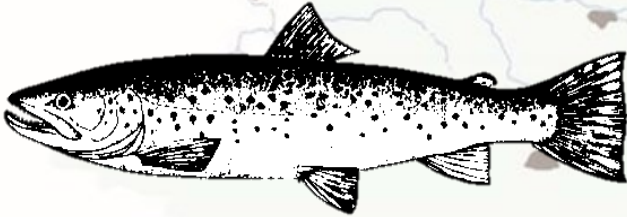
Swimway Vecht



Objective:

Improve fish migration in the River Vecht from source to the sea

Started spring 2019
duration 5 years



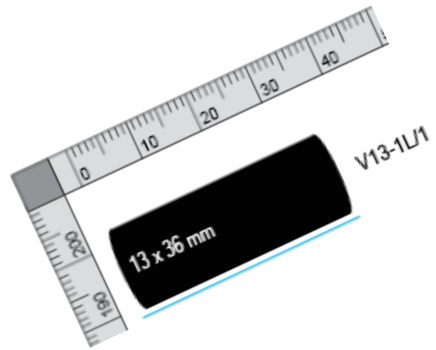
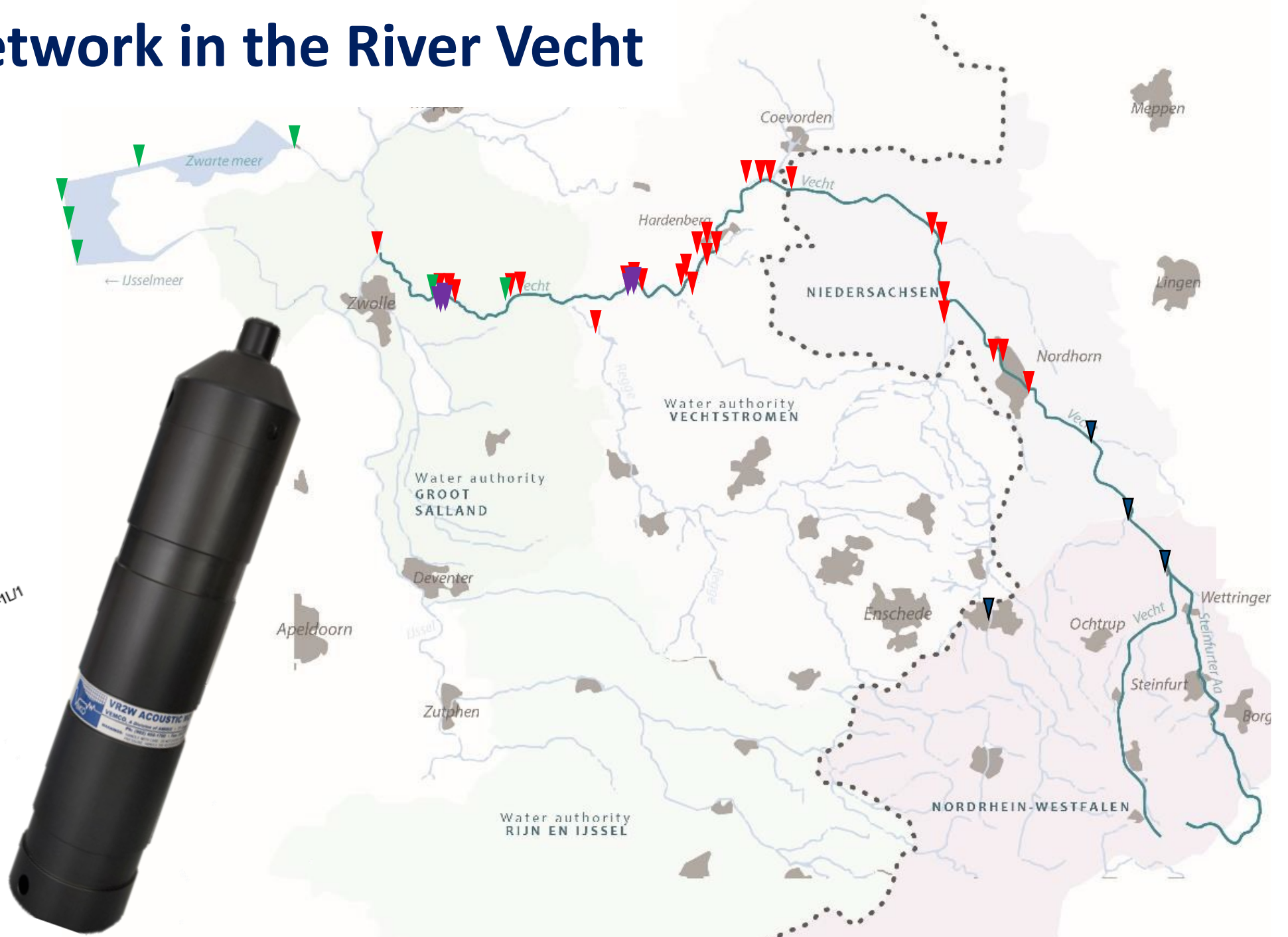
Weirs in the Dutch part of the River Vecht (Overijsselse Vecht)

- **Vechterweerd**
- **Vilsteren**
- **Junne**
- **Diffelen**
- **Hardenberg**
- **De Haandrik**



Acoustic network in the River Vecht

- Autumn 2018
- Spring 2019
- Autumn 2019
- Autumn 2020



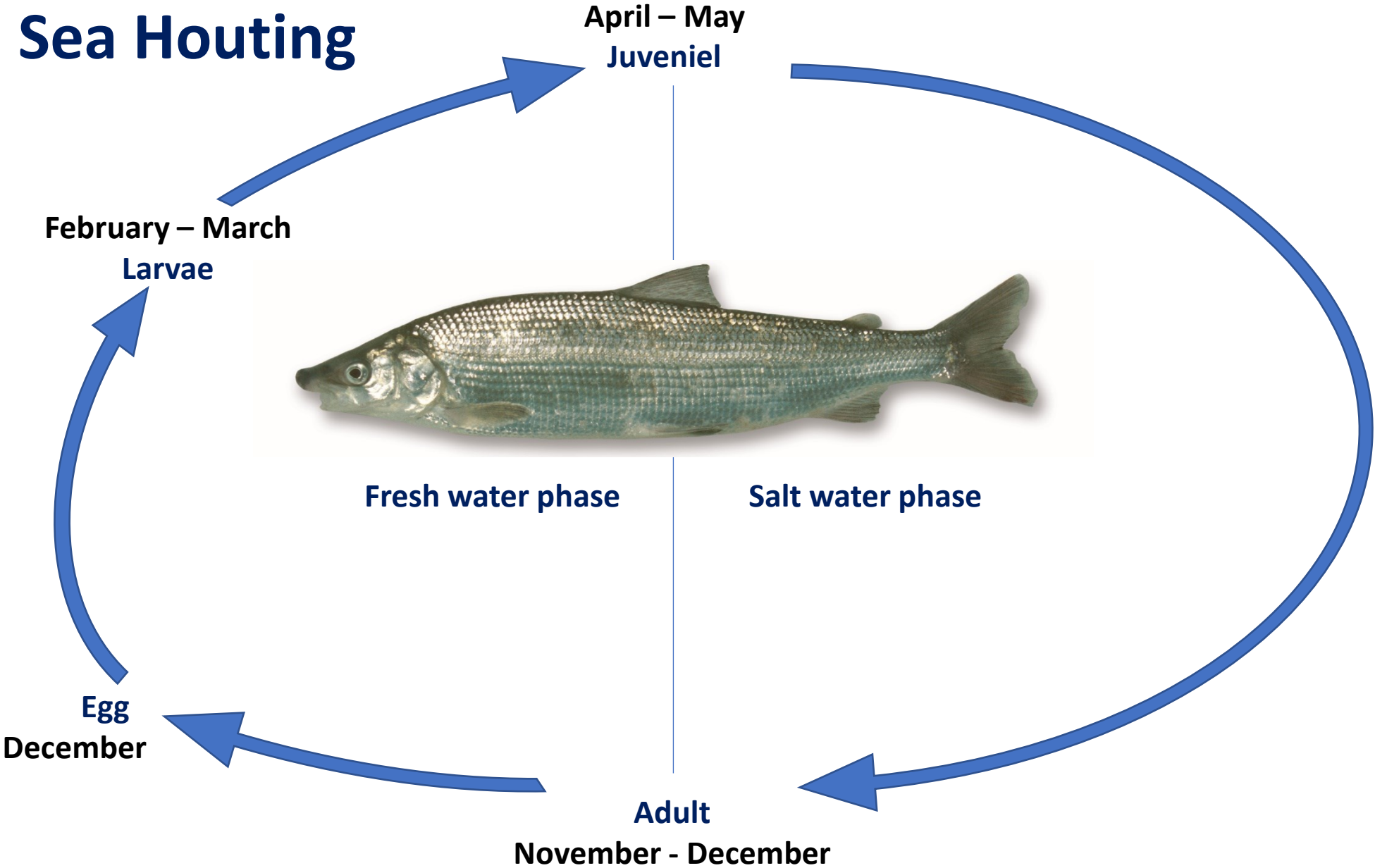
North Sea Houting (*Coregonus oxyrinchus*)



- About the exact taxonomy of North Sea Houting is scientific discussion.
- Houting was extinct in the Netherlands.
- A reintroduction project was started in the mid 90s.
- 10 years later, 96% of juvenile Houting came from natural reproduction.
- The exact spawning locations were unknown, but thought to be in the River IJssel, among others.

Literature: De Groot & Nijsen, 1997; Borcharding et al, 2006, 2008, 2013; Winter et al, 2008, 2010, 2017

North Sea Houting



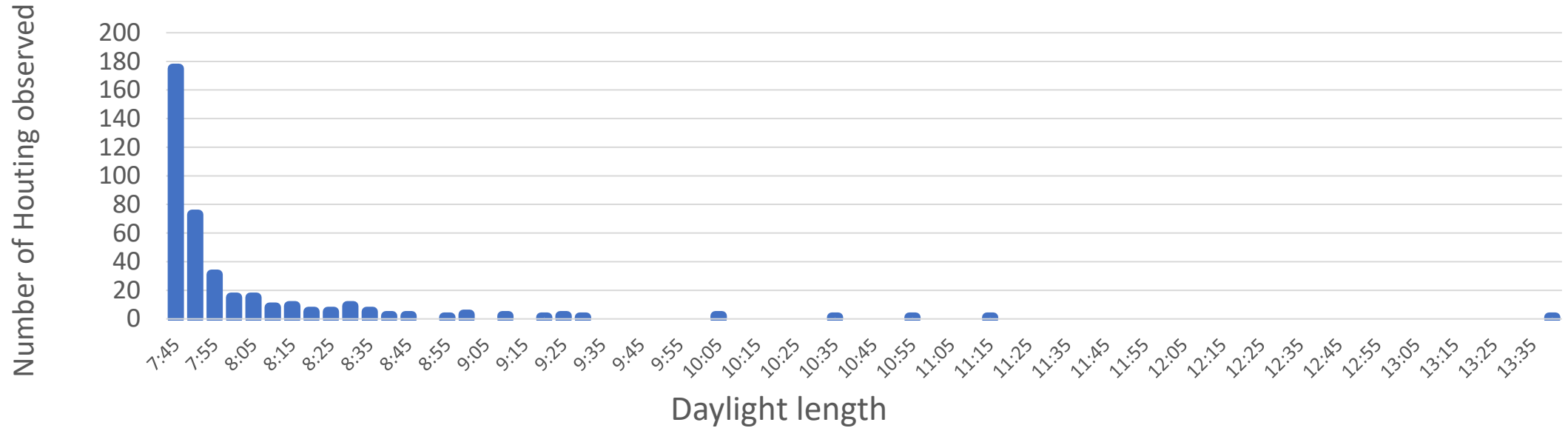
22 (2019) + 39 (2020) North Sea Houting tagged



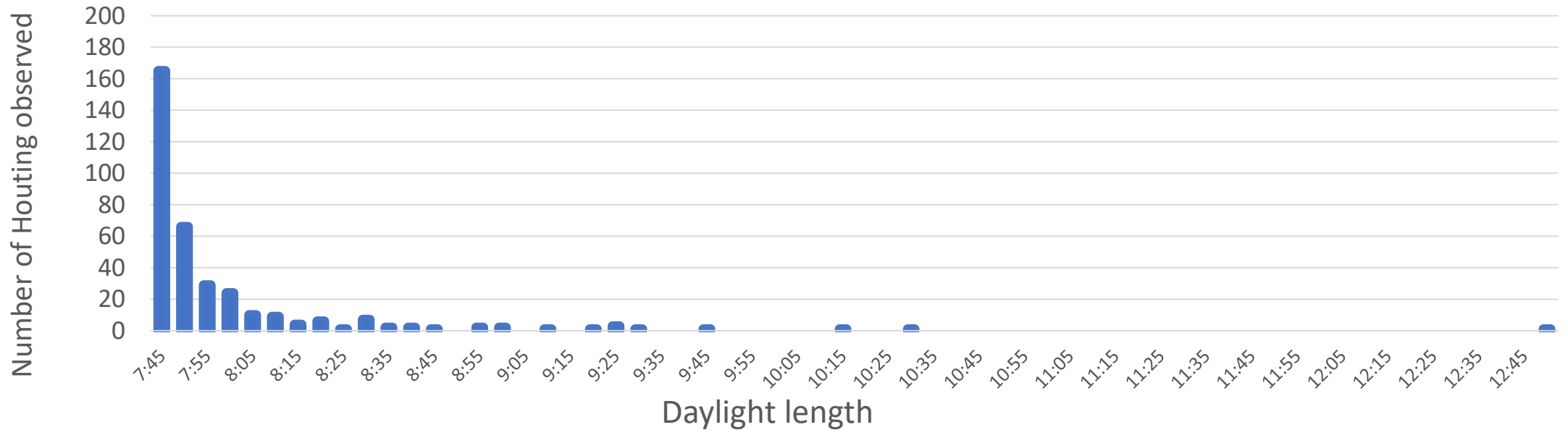
Houting



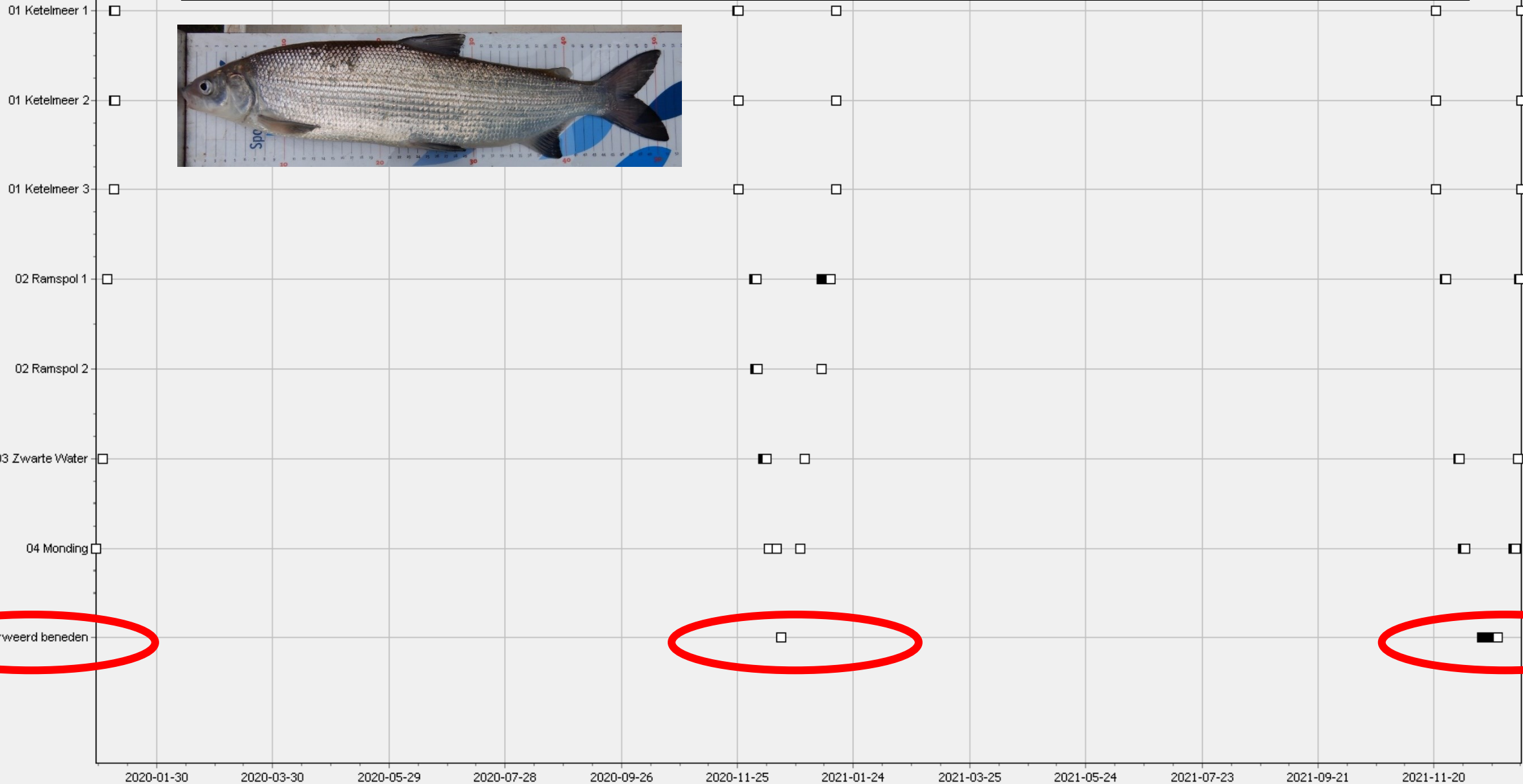
Number of Houting observed during upstream migration by daylight length



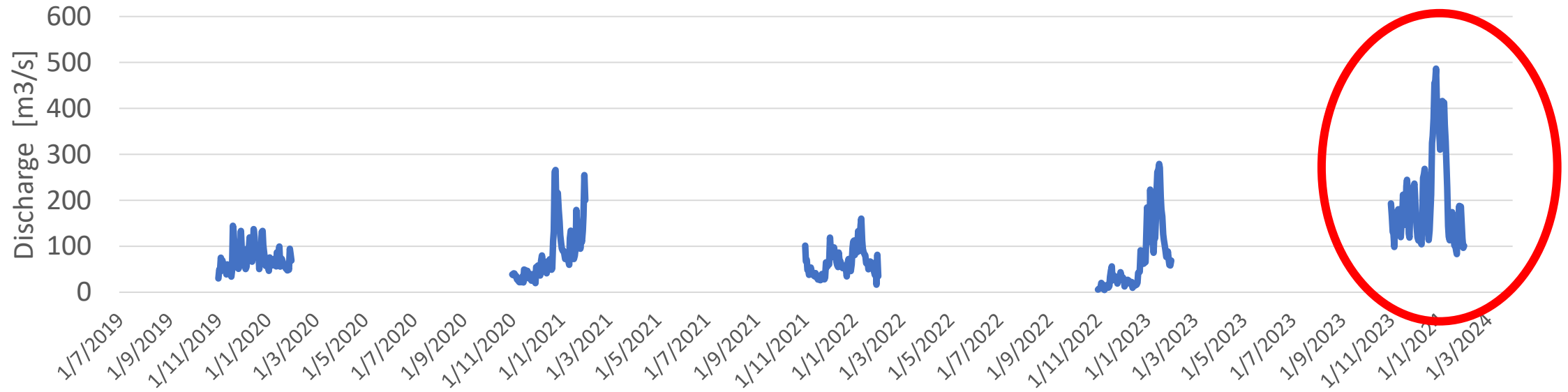
Number of Houting observed during downstream migration by daylight length



Migration - houting, 3 year



Average daily discharge Genemuiden during the period November 1 - February 1 (2019-2024)



December 2023, three Houting approached weir Vechterweerd and all three Houting passed!

A69-1602-55006
A69-1602-55018
A69-1602-55030



Conclusions

1. In the river Vecht a self-sustaining population of Houting has established itself.
2. Houting return annually to the same spawning grounds.
3. The spawning period of Houting is correlated with the shortest daylight length of the year.
4. The most downstream weir, with fish passage, is not passable for Houting under normal conditions.
 - a) Only at extreme high discharge, at the right moment, Houting is able to pass weir Vechterweerd.
 - b) Additional measures are needed at weir Vechterweerd, in the form of a free-flowing side channel



Landes
Fischereiverband
Westfalen und Lippe e.V.

Bezirksregierung
Münster



die grafschaft
Landkreis Grafschaft Bentheim



van hall
larenstein
Inhaltliche Verantwortung



Together towards a more natural water system
and better fish stocks in the river Vecht