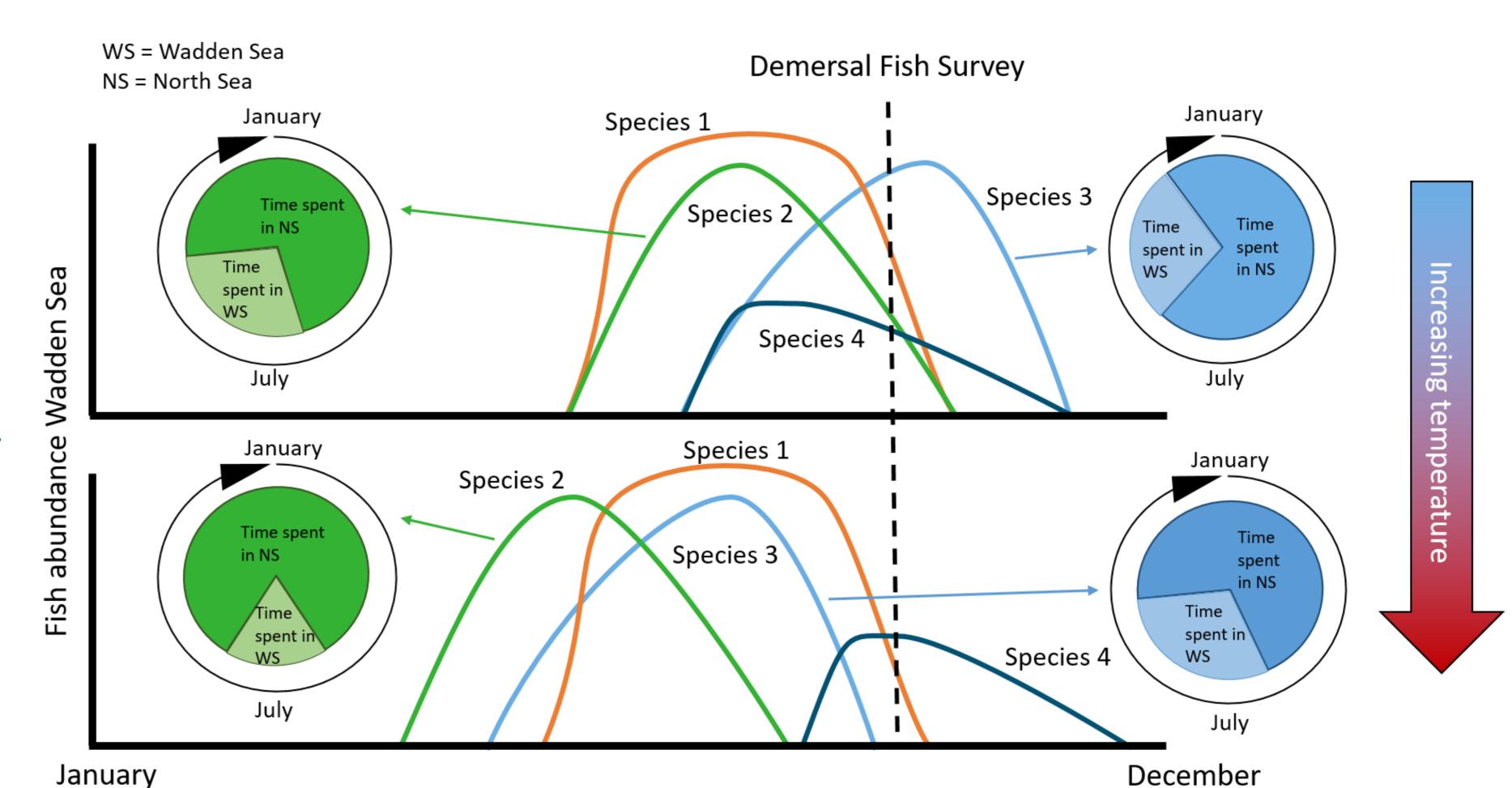
Changes in the nursery function of the Wadden Sea

Jip Vrooman & Ingrid Tulp

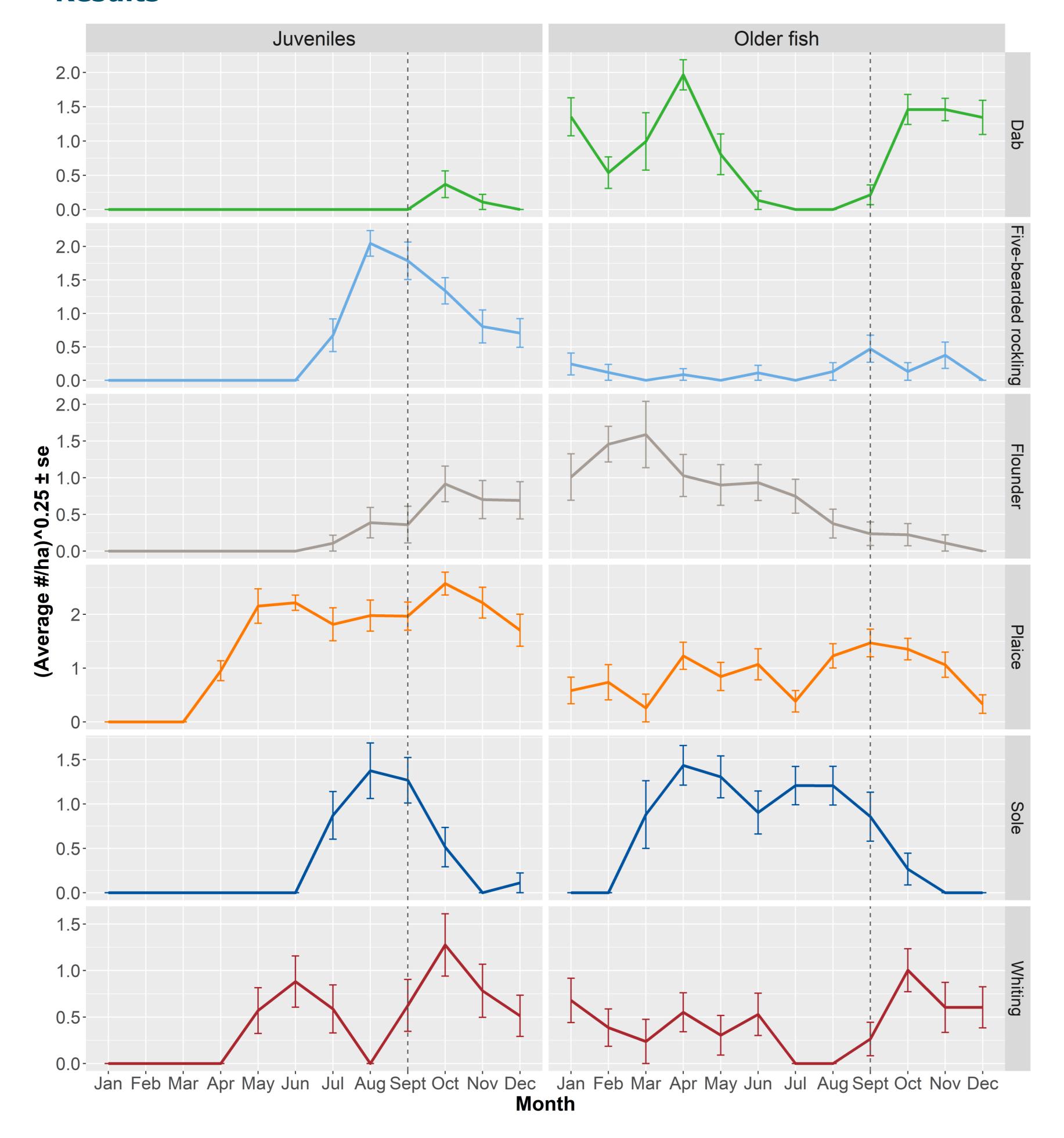


Background

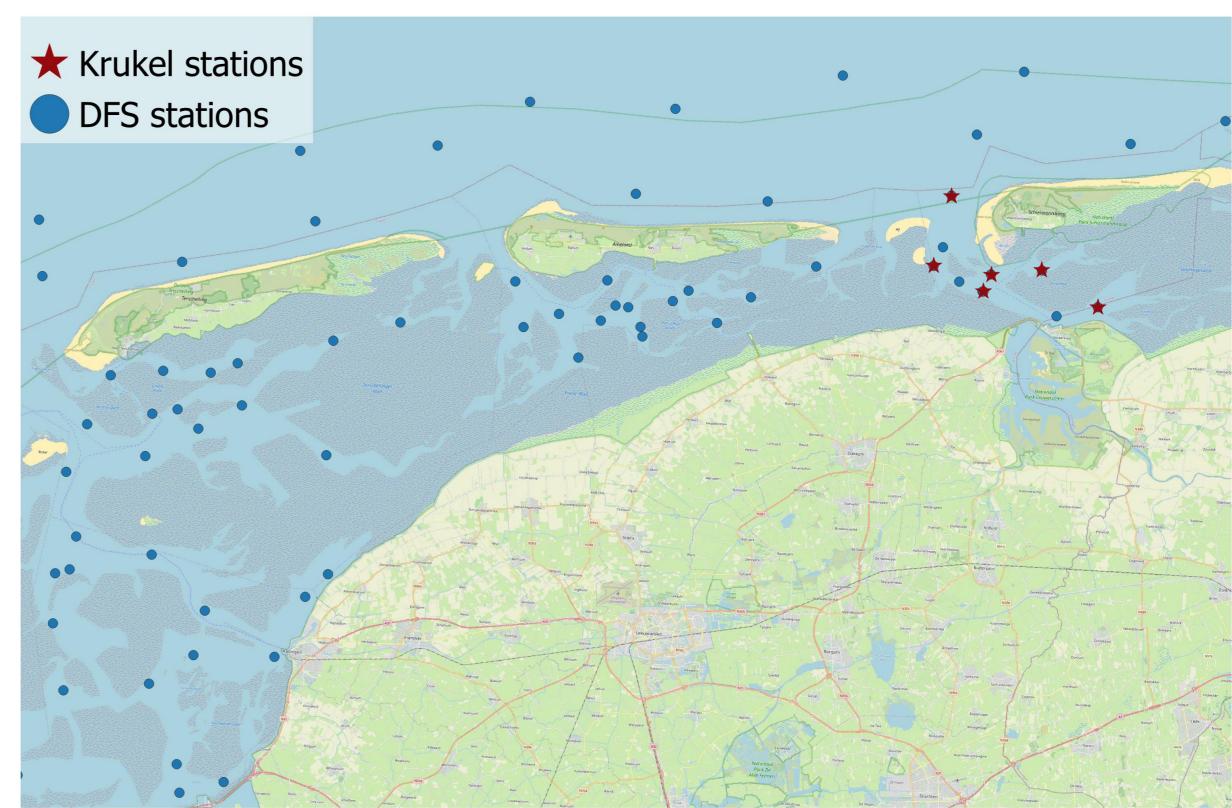
- The nursery function of the Wadden Sea for fish has decreased (survey data)
- In order to better understand why and how the nursery function has changed, we need to know more about the seasonal patterns of the use of the area by fish of different age groups.
- In addition to the annual Demersal Fish Survey (DFS) a three-year year-round survey was carried out at 6 DFS positions.
- Do fish still use the Wadden Sea, but did they adjust their timing?



Results



- Marine juveniles show clear seasonal patterns
- Juveniles arrive in the Wadden Sea in the course of spring and summer
- Older individuals fluctuate throughout the year
- 'Peak' months are not always during the DFS in September





Conclusions & next steps

- DFS in September not optimal timing for all species, but still right for (young) sole and plaice.
- Data to be compared to historic data to study phenology shifts.
- Monthly sampling should be part of the standard monitoring: it provides valuable information additional to the DFS, and enables to evaluate climate change effects on the phenology of Wadden Sea fish.

