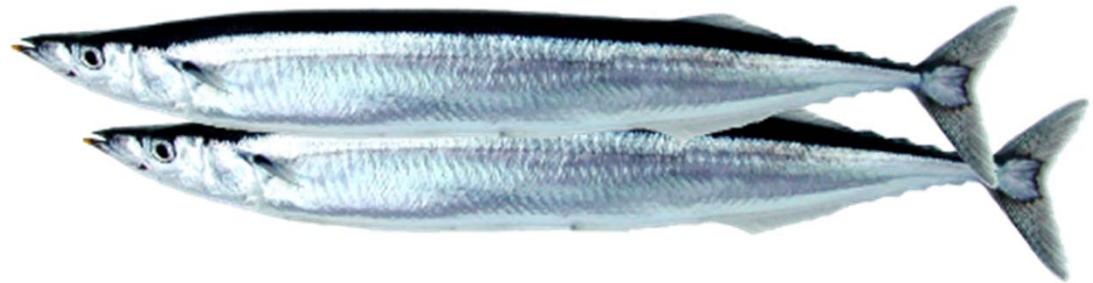


Review of progress on update/refinement of catch series

Pacific saury fishing condition in Japan in 2021 and 2022



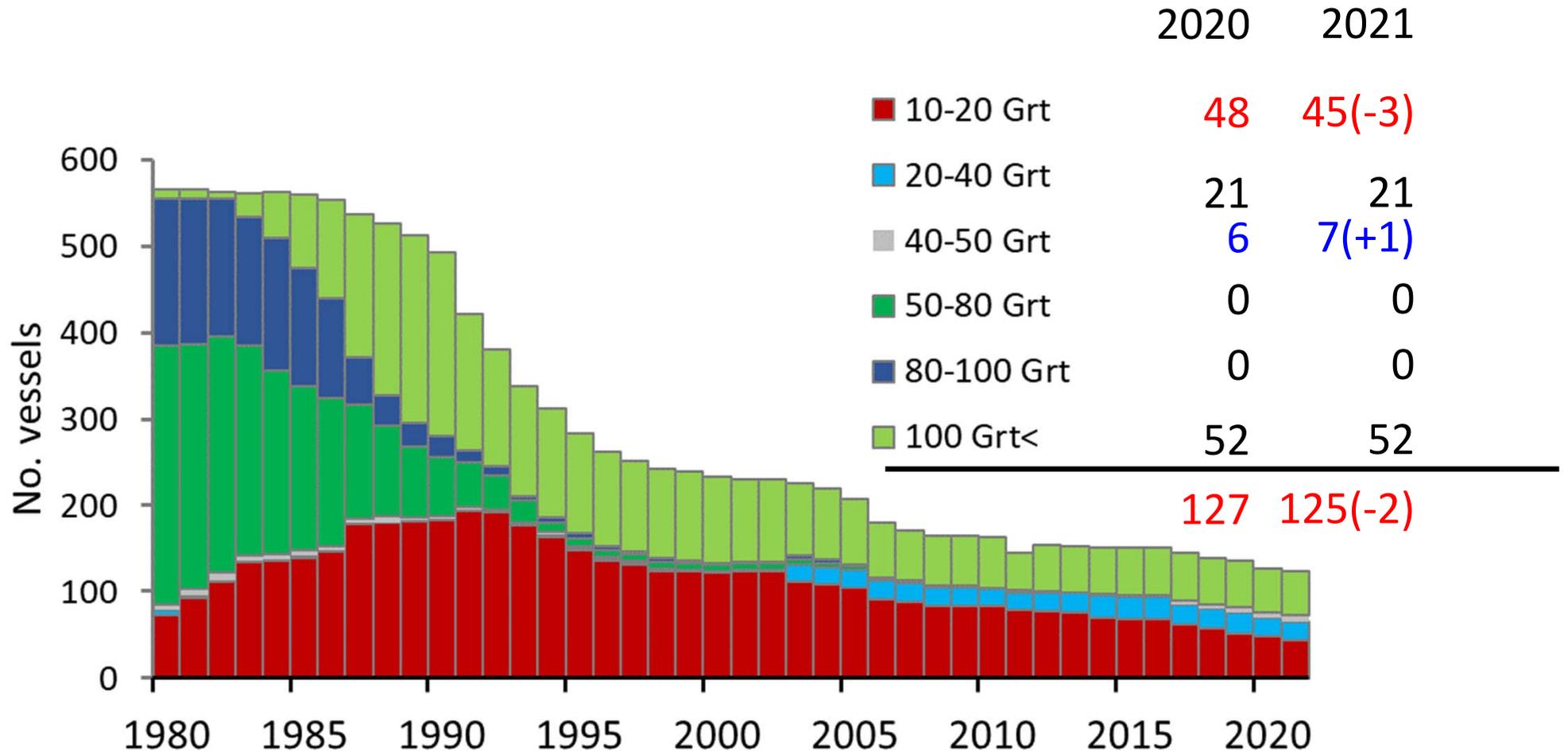
Fisheries Resources Institute,
Japan Fisheries Research and Education Agency

Pacific saury fishing condition in Japan in 2021



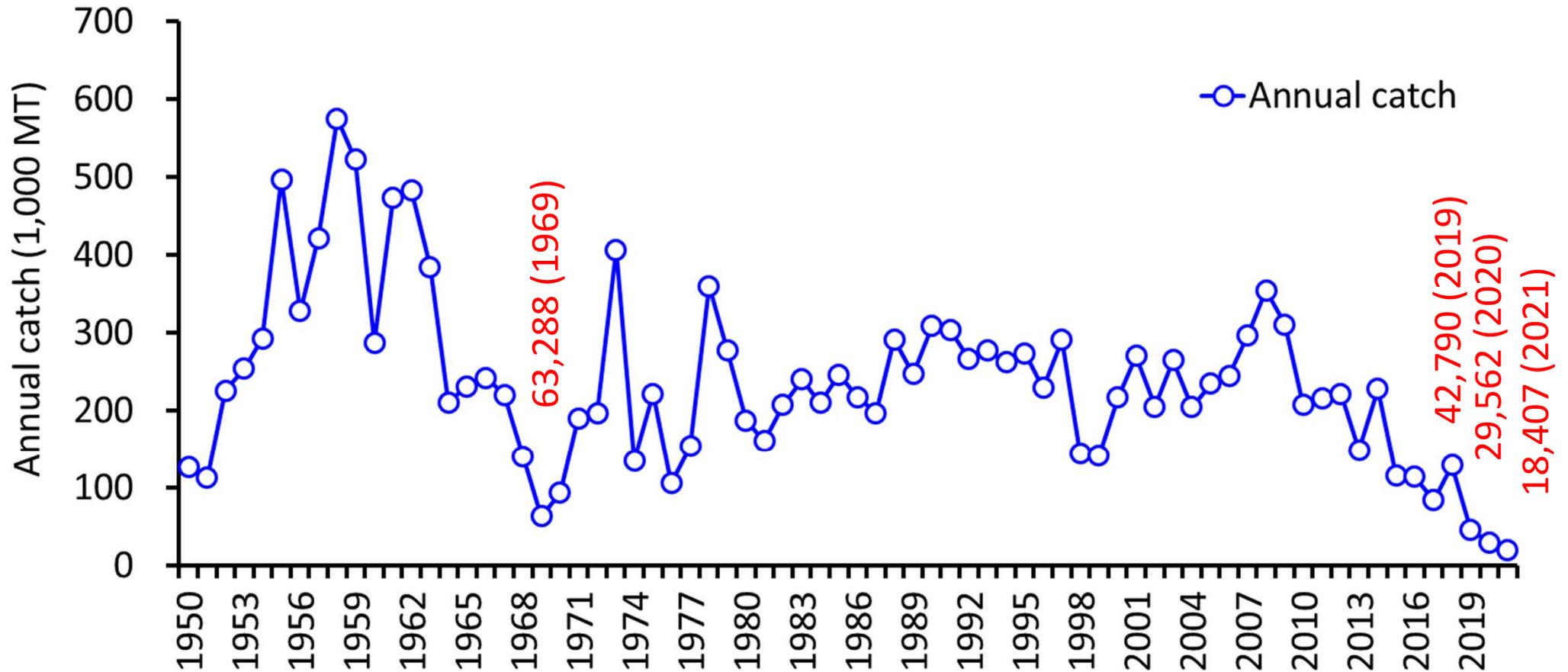
Number of vessels

Licensed by the Ministry of Agriculture, Forestry and Fisheries



- One hundred and twenty-five fishing vessels are registered.
- Two vessels decreased compared to previous year.
- Some small fishing vessels are suspending operation because the fishing ground is far.

Annual catch in Japan (1950-2021)

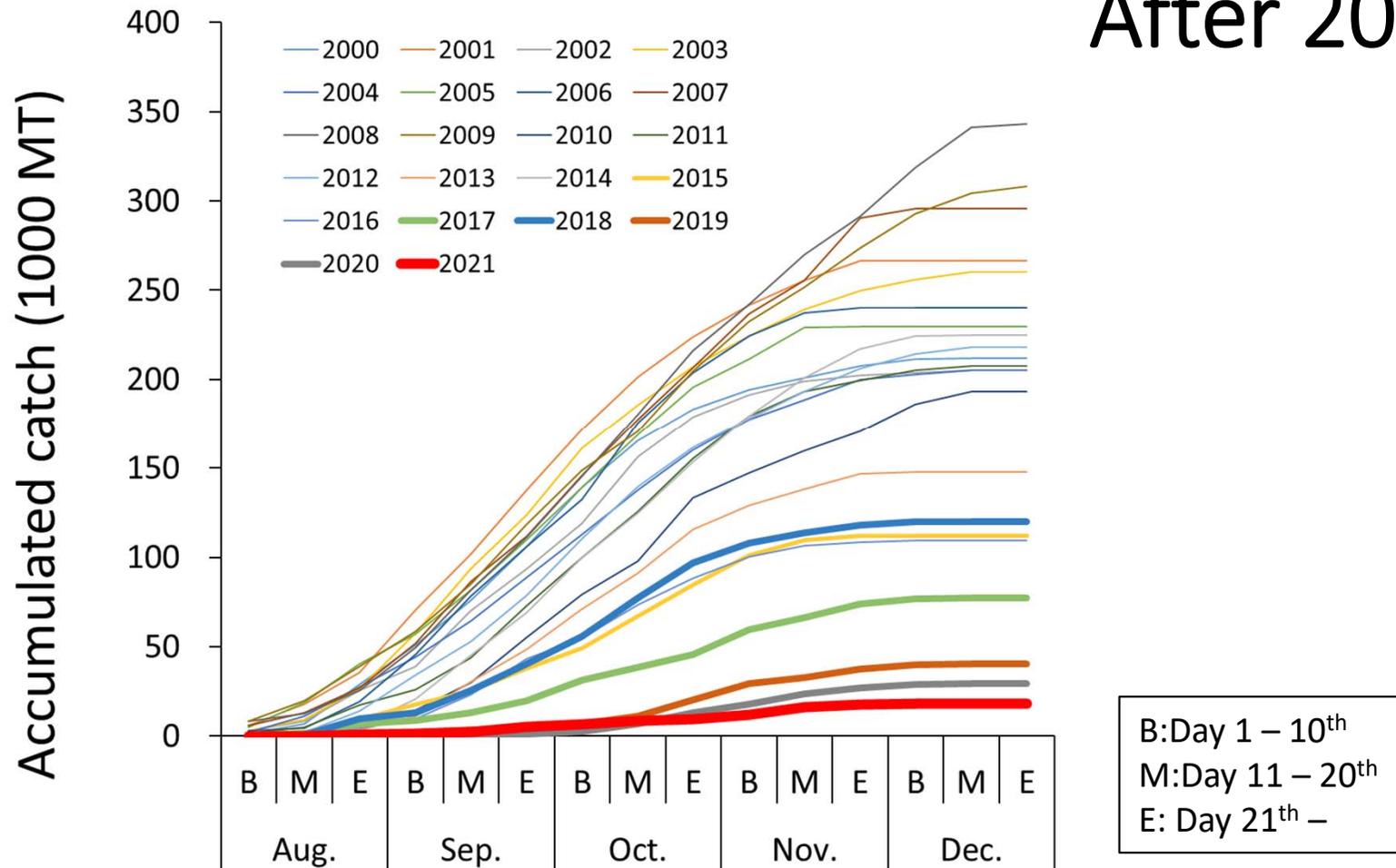


■ Total catch in 2021 was **18,407 MT**.

■ The annual catch in 2021 was the lowest since 1950.

Accumulated catch

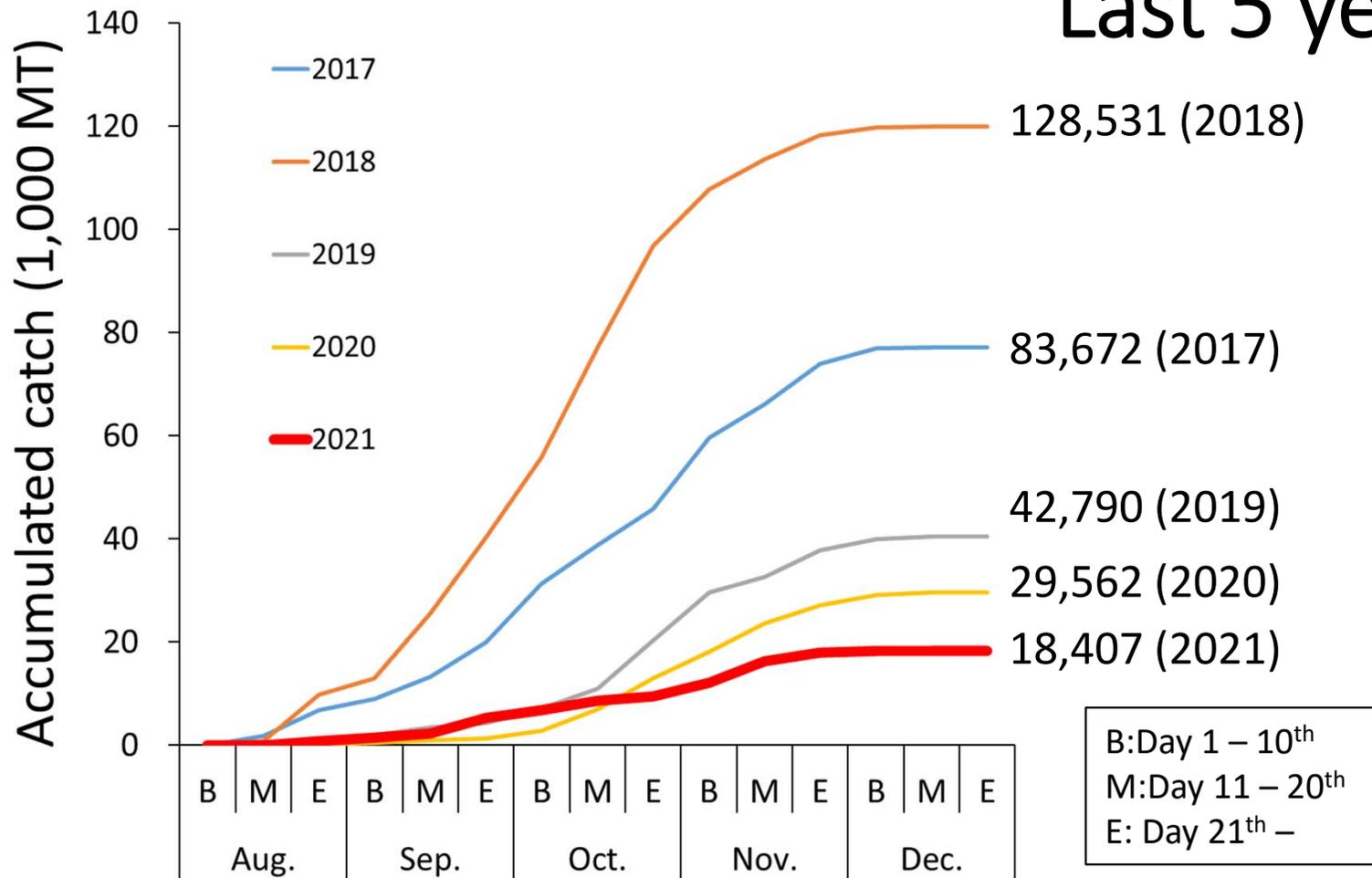
After 2000



- Accumulate catches until September in 2021 were higher than in 2019 and 2020.
- However, accumulated catch after middle of October was lower than that of last year.

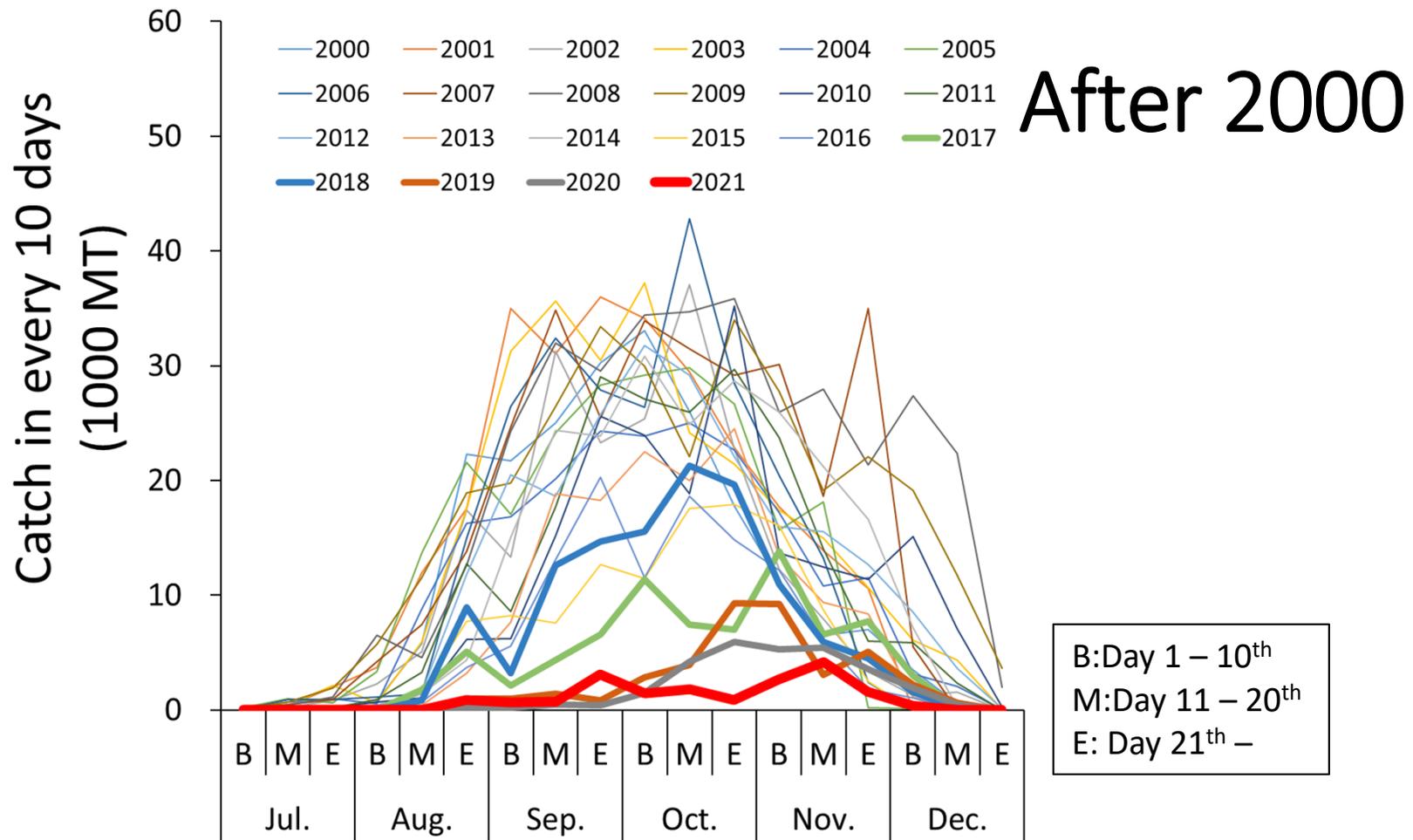
Accumulated catch

Last 5 years



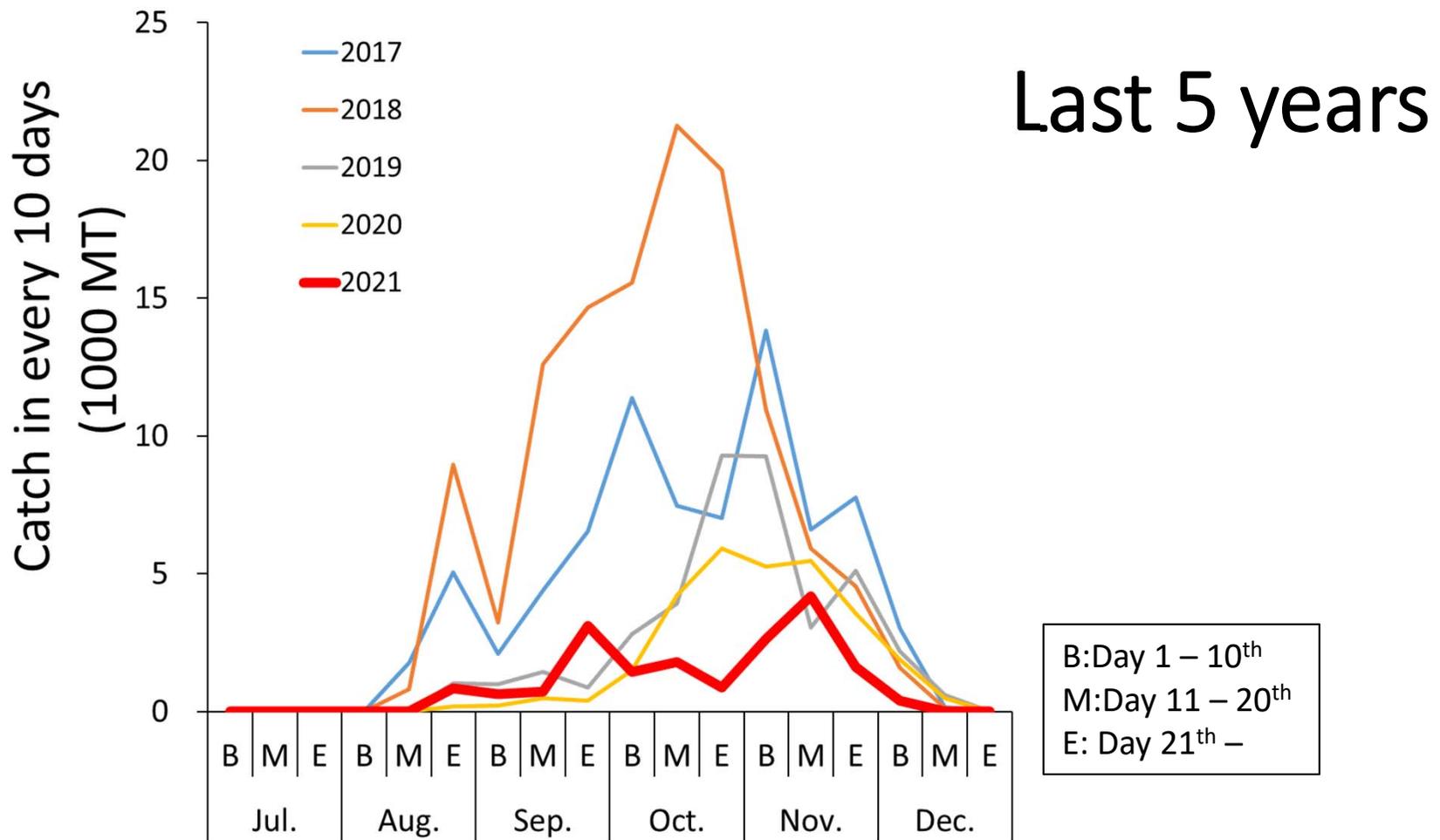
- Accumulate catches until September in 2021 were higher than in 2019 and 2020.
- However, accumulated catch after middle of October was lower than that of last year.

Seasonal catch (Catches in 10 days)



- Catches in 10 days until early October in this year were higher than last year.
- Since mid-October has been lower than last year.

Seasonal catch (Catches in 10 days)

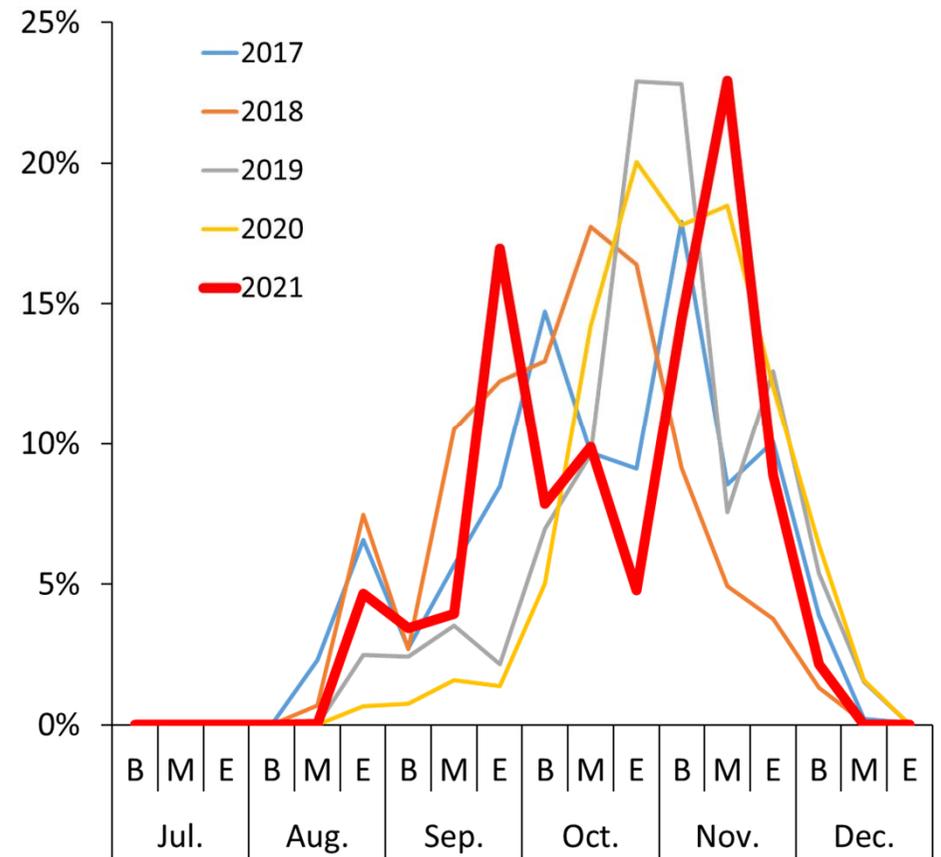
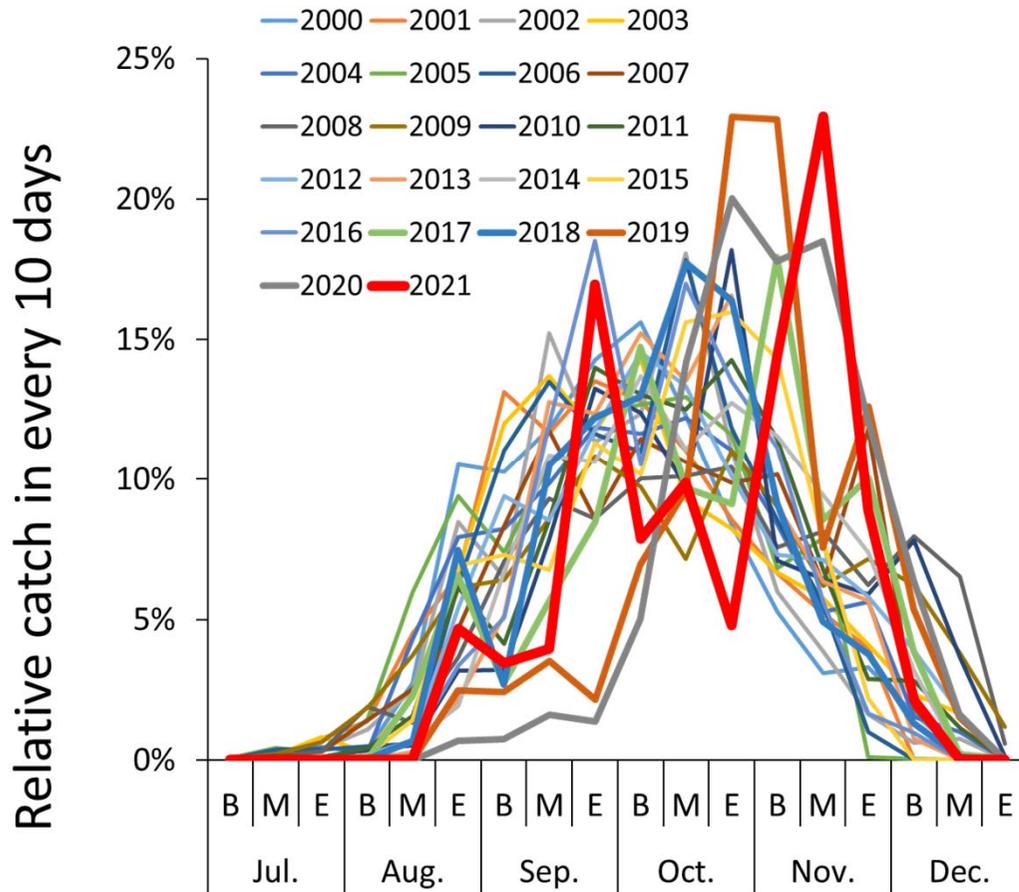


- Catches in 10 days until early October in this year were higher than last year.
- Since mid-October has been lower than last year.

Relative accumulated catch

After 2000

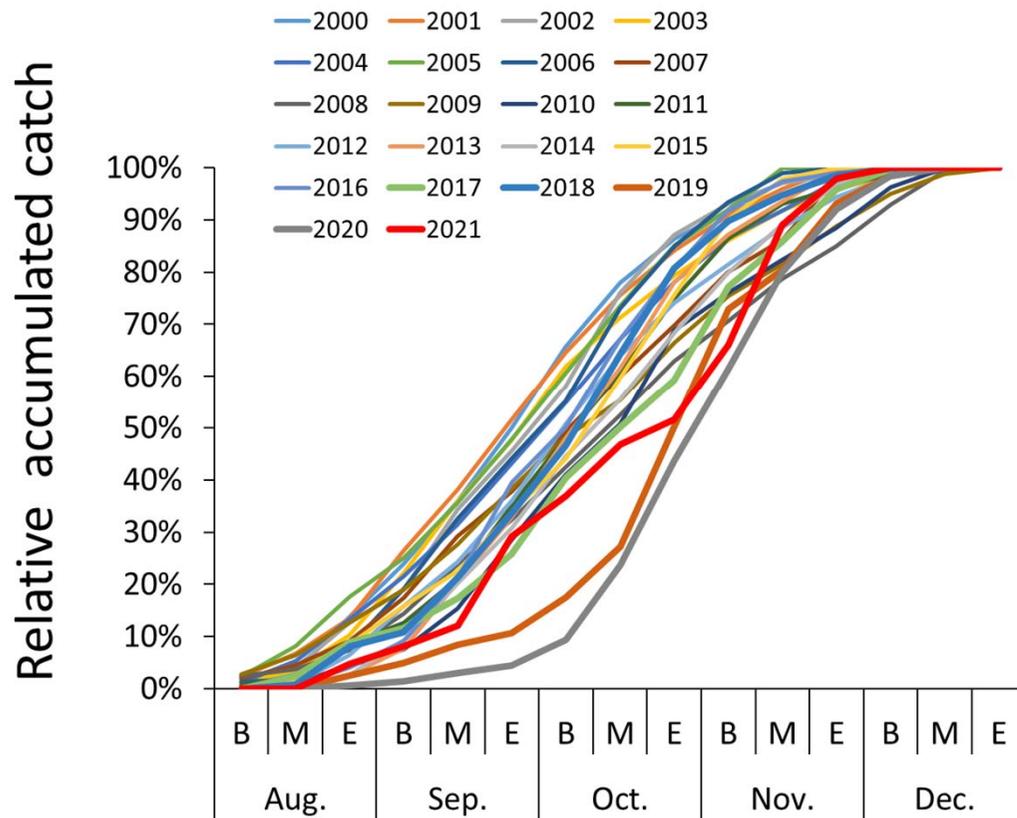
Last 5 years



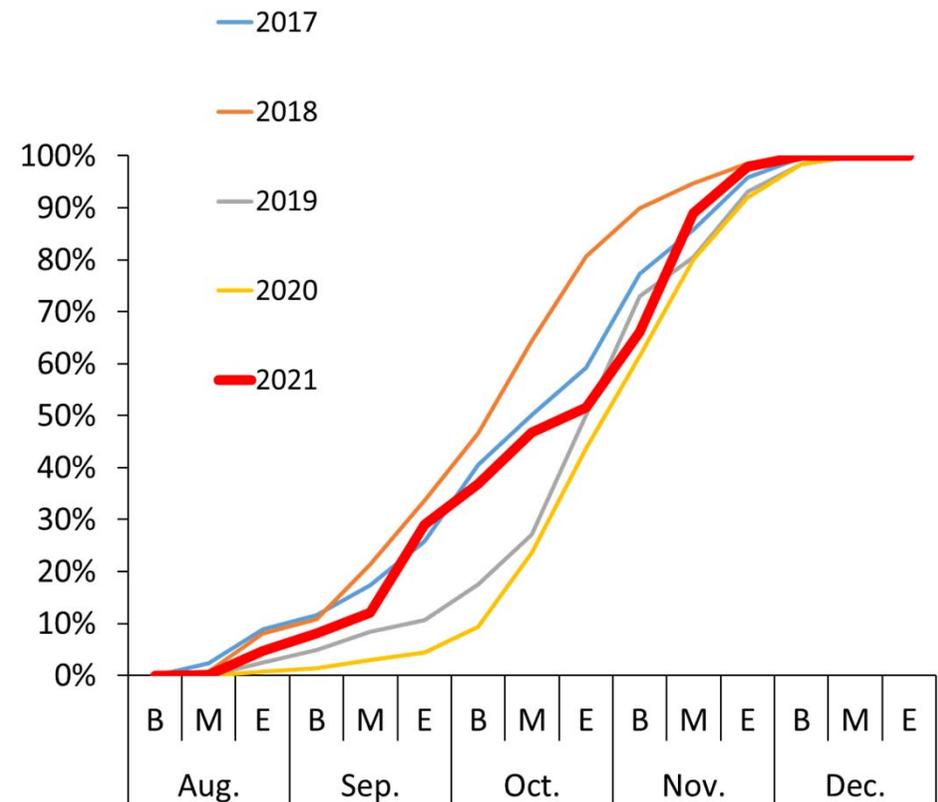
B: Day 1 – 10th
 M: Day 11 – 20th
 E: Day 21th –

Relative Seasonal catch (Catches in 10 days)

After 2000

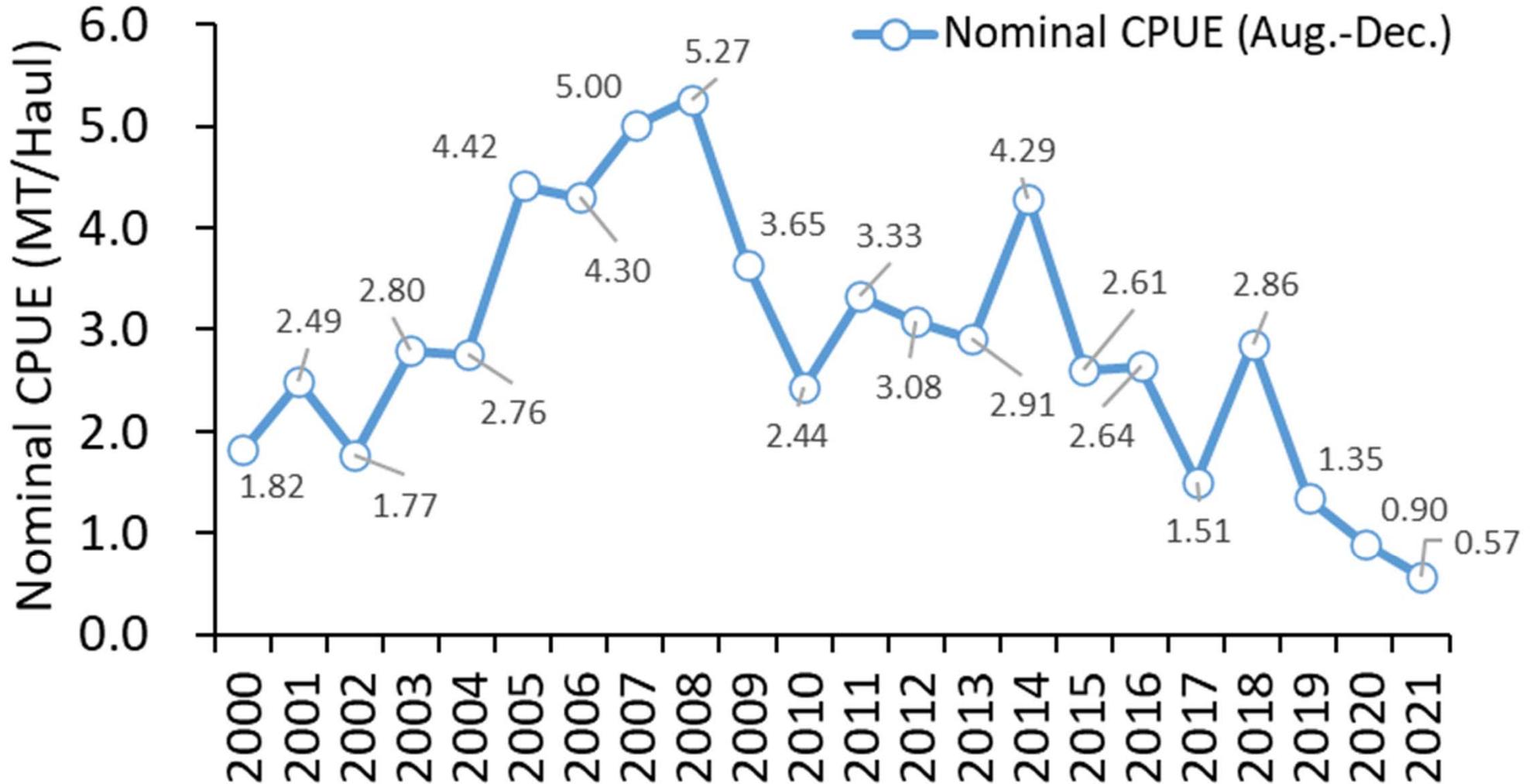


Last 5 years



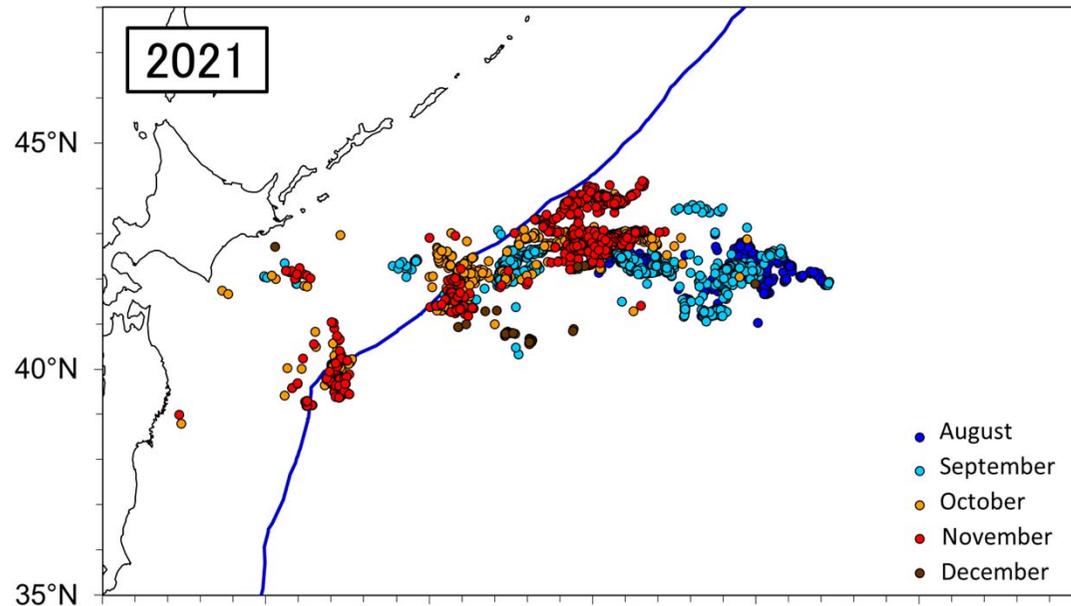
B: Day 1 – 10th
M: Day 11 – 20th
E: Day 21th –

Nominal CPUE

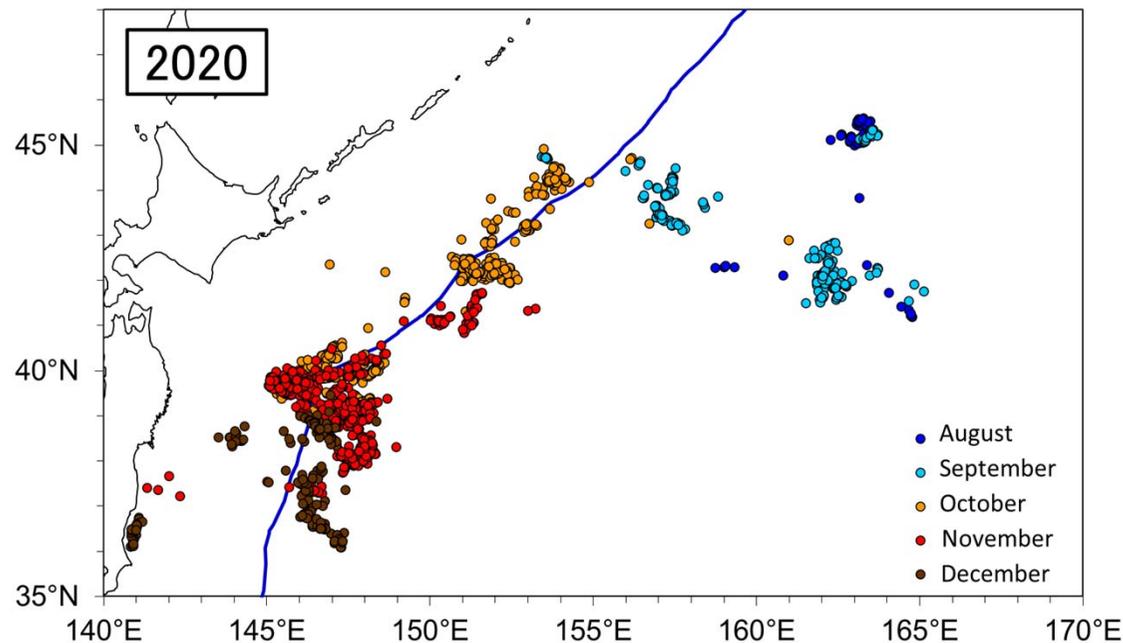


■ Nominal CPUE was 0.57 and lowest since 2000.

Fishing grounds after August

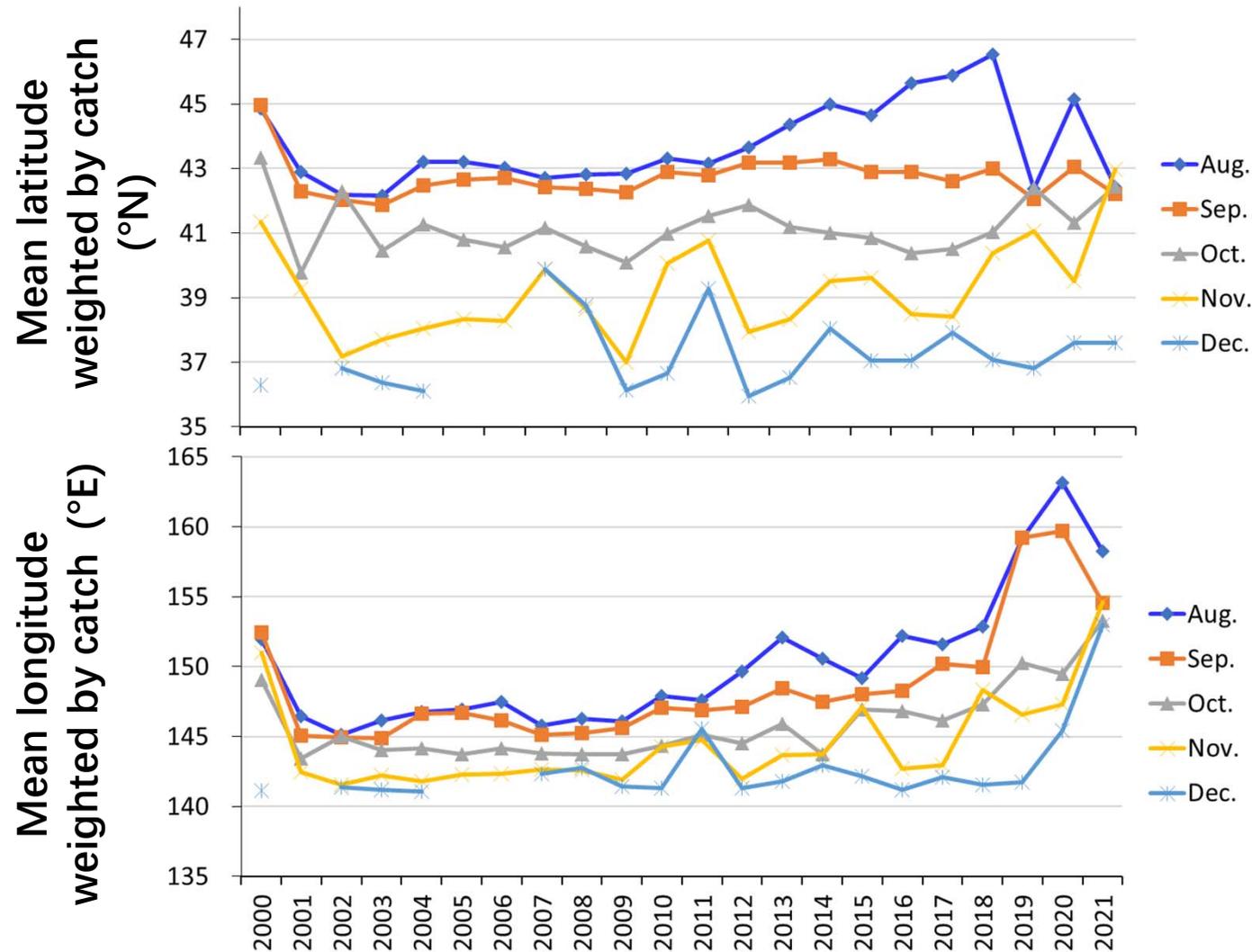


August
High seas
September to December
Mainly high seas



August
High seas (East of 155E)
September
High seas (East of 150E)
October & November
High seas and EEZ

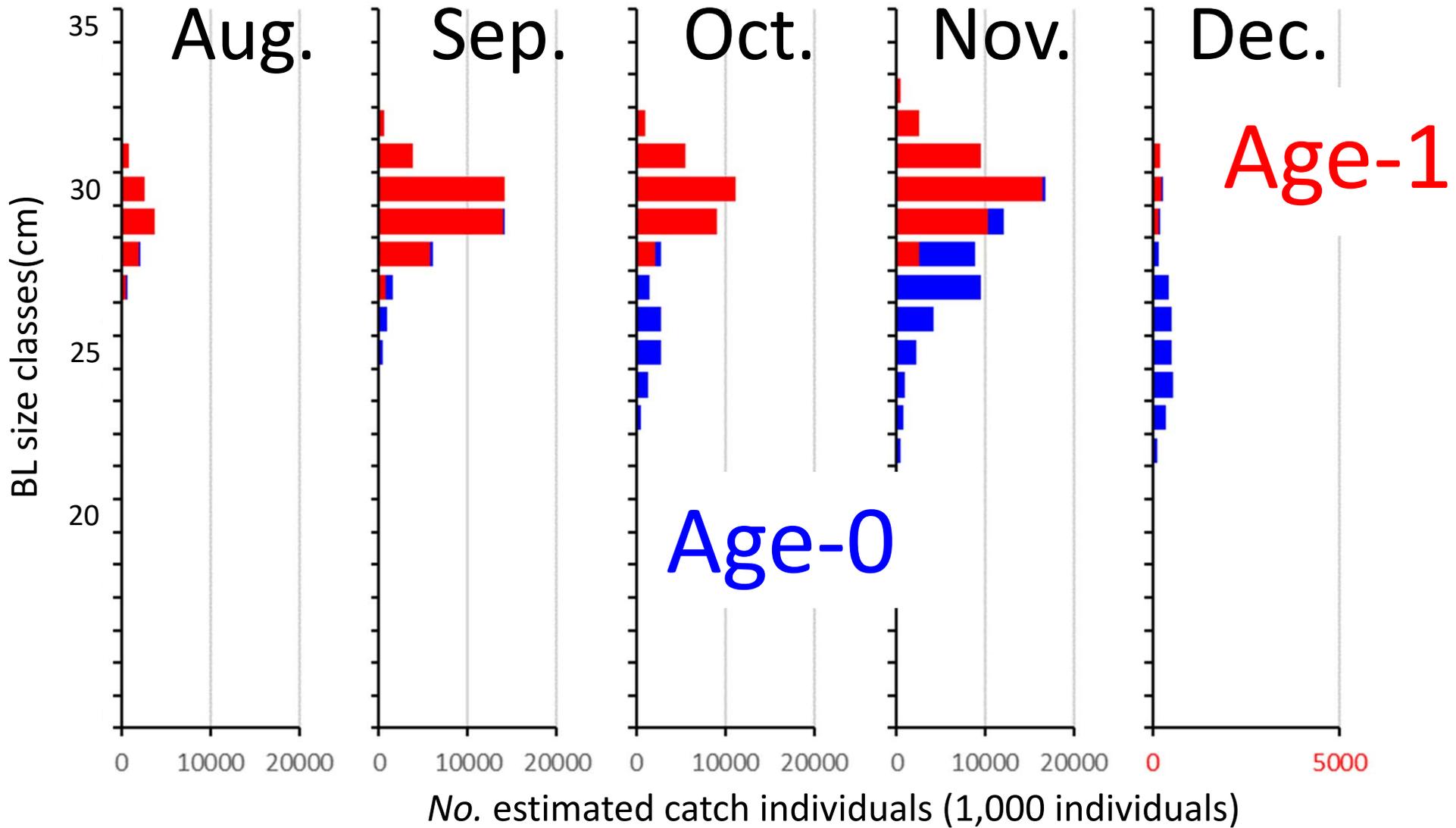
Annual change of fishing ground



- Since 2010, the fishery ground has gradually moved east, particularly after 2019.
- In 2021, fishing grounds almost did not move in the east-west direction from September to December.

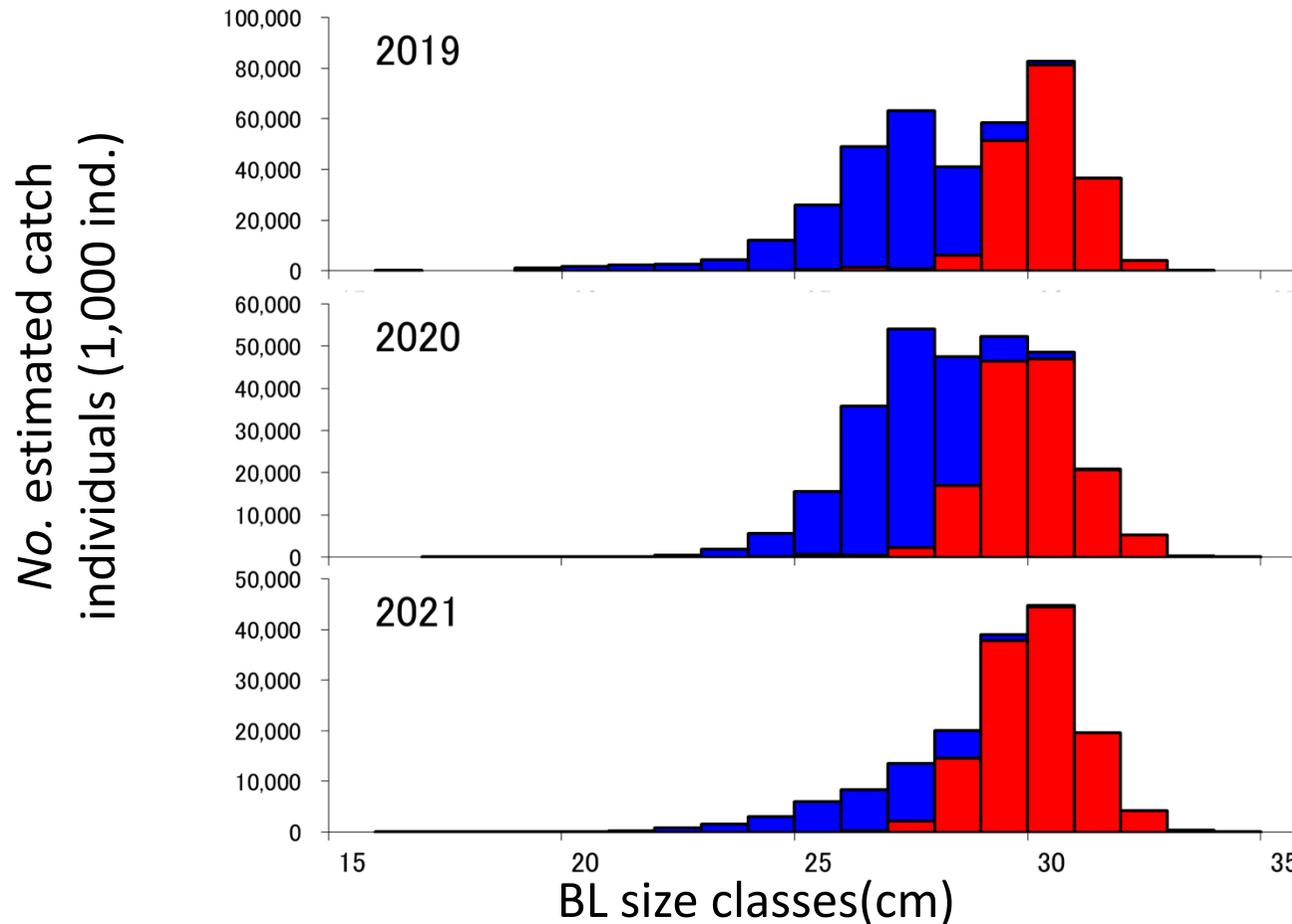
Body length and age compositions

2021



- Caught fish were consisted in mainly age-1 fish until October.
- Age determinations were performed based on otolith annual ring.

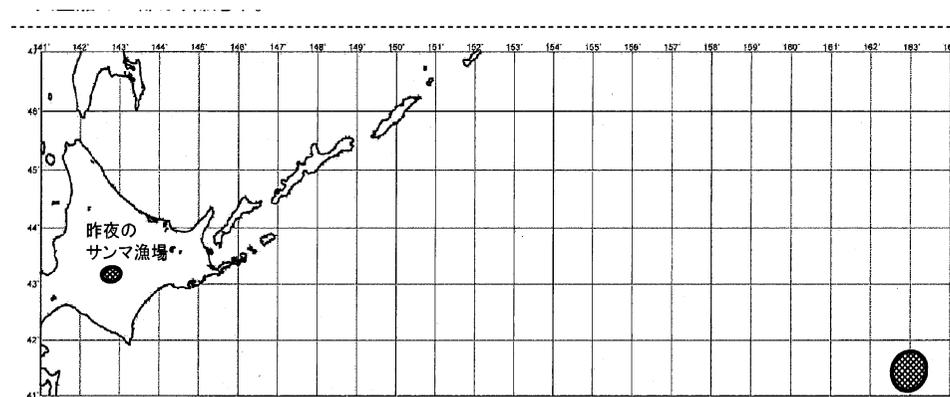
Body length and age compositions



- Total of 76% caught fish were age-1 fish in 2021.
- Body length composition showed a single mode.
- Ranges of body length for age-0 and age-1 fish were overlapped.

Pacific saury fishing condition in Japan in 2022

- Number of fishing vessel is 113 (8 vessels decreased)
- Japanese fishing season for Pacific saury started in August.
- Total landing by 26 August was only 70 MT.
- Fishing vessels operating high seas. (around 40-41°N, 160 °E)



Summary

Pacific saury fishing condition in Japan in 2021 and 2022

2021

- The annual catch in 2021 was **18,407 MT**, the lowest since 1950.
- Nominal CPUE was 0.76 and lowest since 2000.
- Most of the fishing grounds were located on the high seas.

2022

- Japanese fishing season for Pacific saury started in August.
- Total landing by 26 August was only 70 MT.

Thank you for your attention !