# Migration and coastal recruitment of jack mackerel *Trachurus japonicus* around the Korean waters

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# Pelagic fishes in the East China Sea



Jack mackerel (Trachurus japonicus)

\*Widely distributed in East Asian waters \*One of the most important fishery resources in Korea, Japan and Taiwan

### **Catches** of jack mackerel



#### Comparison of catch of Korea to the TWC population



Commercial use for jack mackerel is very low in Korea
Necessary for using the resources more commercially



### Spawning ground & Transport path

Spawning ground: northeast of Taiwan (Sassa and Konishi, 2006)

Transport path: to downstream region along the Kuroshio



### Transport of jack mackerel



#### Coastal setnet stations and monitoring of

water temperature





### Daily catch of jack mackerel at each setnet station

#### 1. Time difference of coastal recruitment



around Korean waters

### 2 & 3. Seasonal and regional no recruitment



Weak expansion of TSWC in May → no recruitment into Jeju Weak expansion of TSWC & cold waters at the coast

 $\rightarrow$  no recruitment in the southern area



#### 3. No regional recruitment in the southern area (Yeosu)



#### Size frequency at the southeastern area of Korea (Gijang)



- Recruiting mainly in spring
- Generally influenced by winter spawned population

## Conclusions



# Thank you!