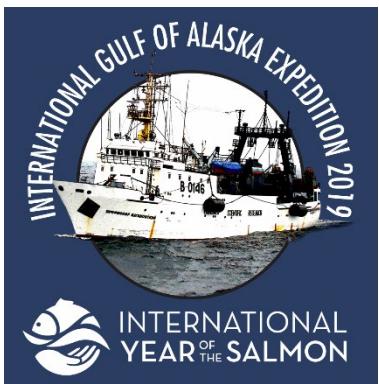




ВСЕРОССИЙСКИЙ  
НАУЧНО-ИССЛЕДОВАТЕЛЬСКИЙ ИНСТИТУТ  
РЫБНОГО ХОЗЯЙСТВА И ОКЕАНОГРАФИИ

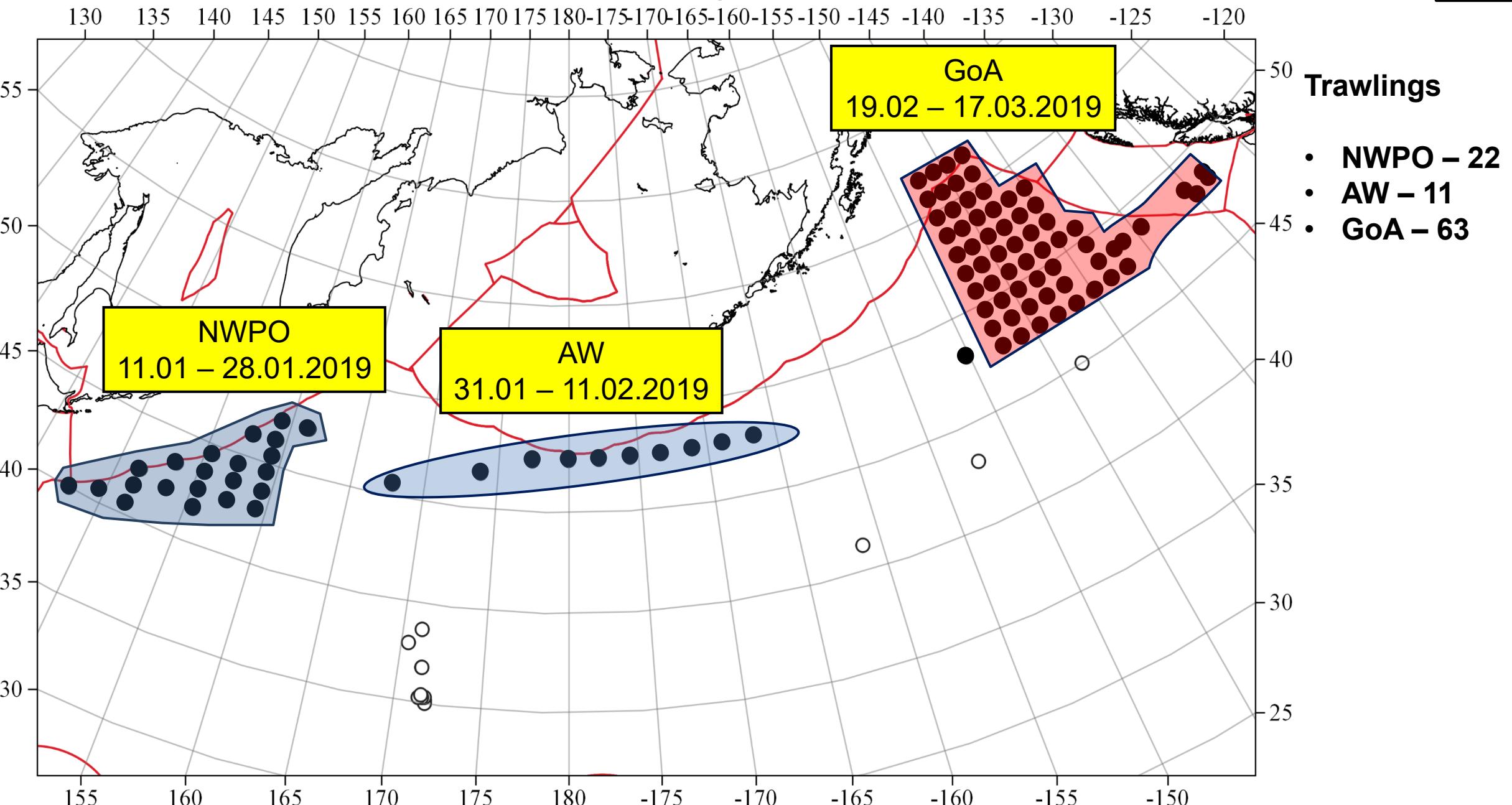
# Occurrence of non-salmonid species in the Northwestern Pacific Ocean and Gulf of Alaska during the 2019 winter survey



**Kanzeparova A., Somov A., Vazhova A.,  
Zuev M., Ivanov A.**

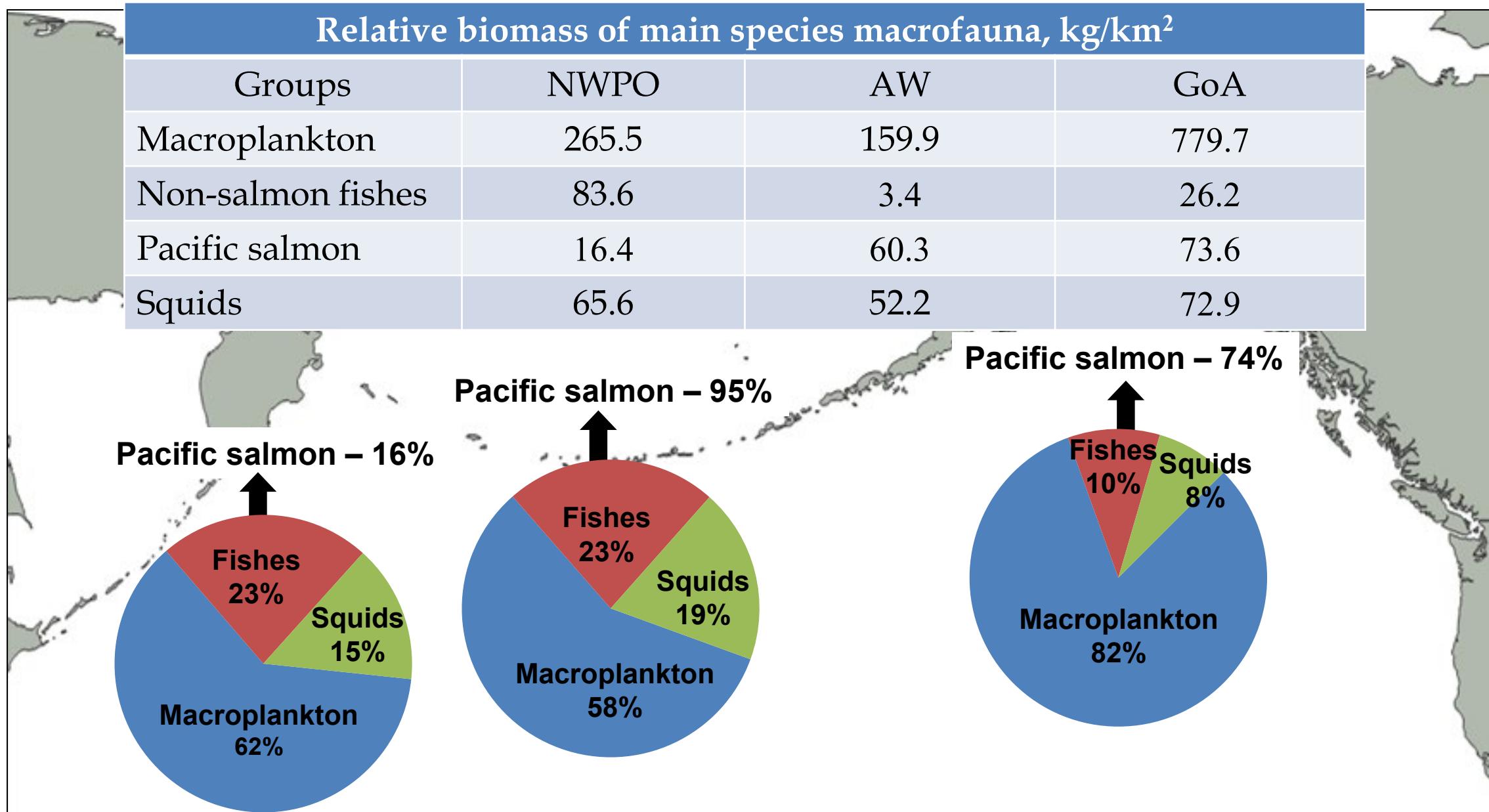
**«VNIRO» («TINRO»), Vladivostok**

# Study area



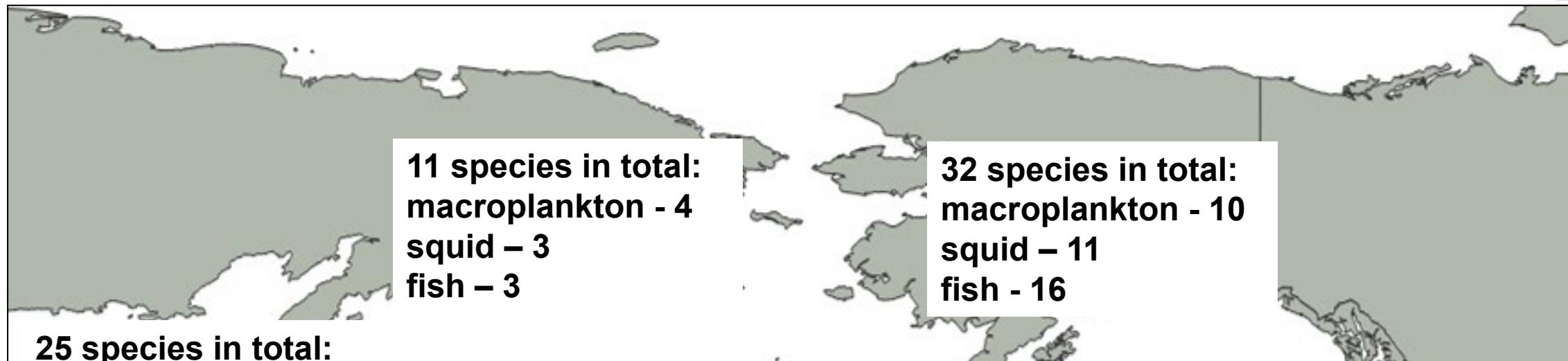
# Composition of non-salmon species

3



# Composition of non-salmon species

4



**25 species in total:**  
macroplankton - 10  
squid – 3  
fish - 12

11 species in total:  
macroplankton - 4  
squid – 3  
fish – 3

32 species in total:  
macroplankton - 10  
squid – 11  
fish - 16

*Aequorea sp.* – 32%  
*Chrysaora melonaster* – 9%  
*B. borealis* – 11%  
*Watasenia scintillans* – 5%  
*Scomber japonicus* – 11%  
*Sardinops melanostictus* – 7%  
*Tarletonbeania crenularis* – 1%

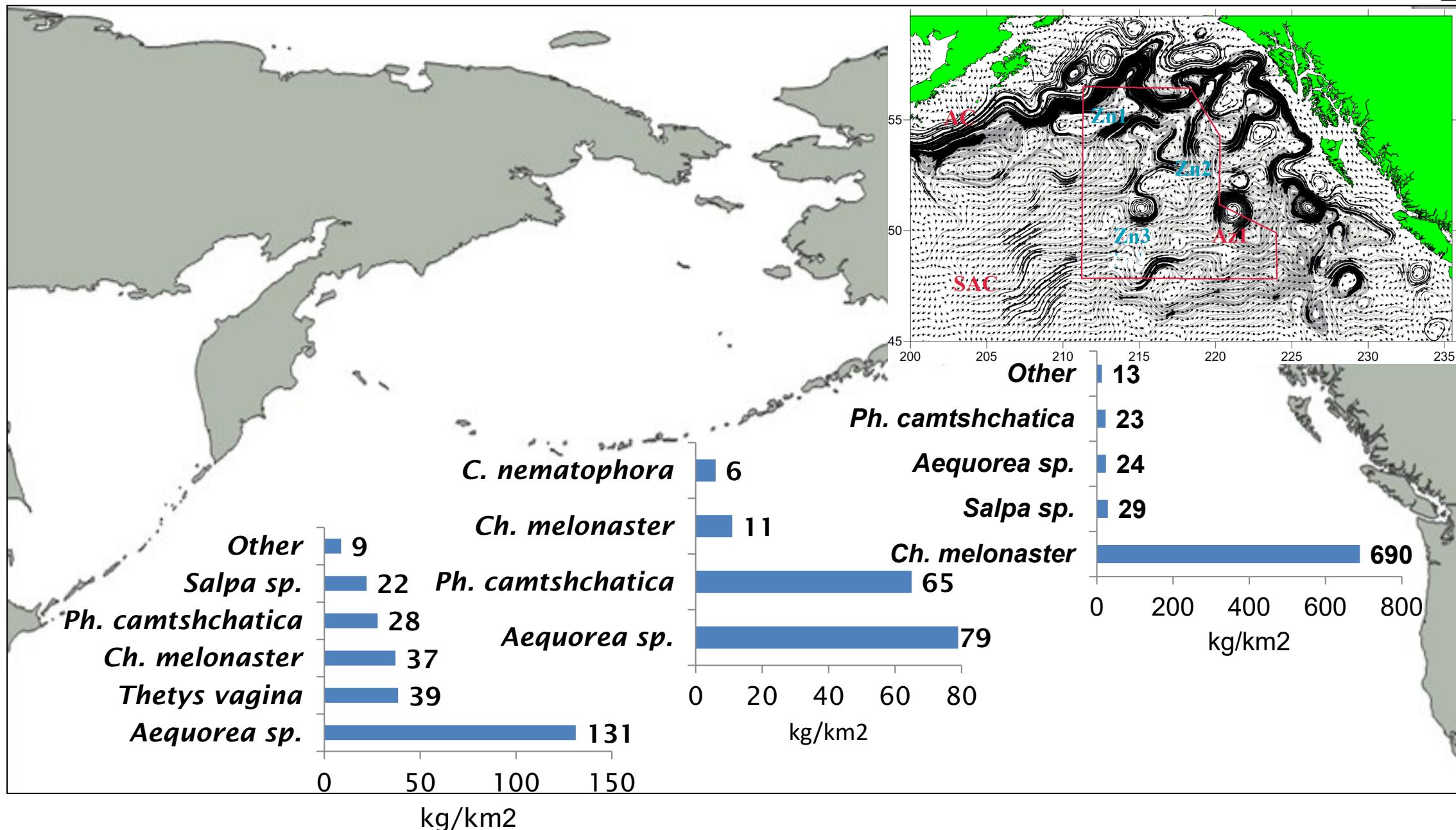
*Aequorea sp.* – 37%  
*Ph. camtshchatica* – 30%  
*B. borealis* – 22%  
*Tarletonbeania crenularis* – 1%

*Chrysaora melonaster* – 78%  
*Salpa sp.* – 3%  
*B. borealis* – 4%  
*Onychoteuthis borealijaponica* – 3%  
*Tarletonbeania crenularis* – 2%

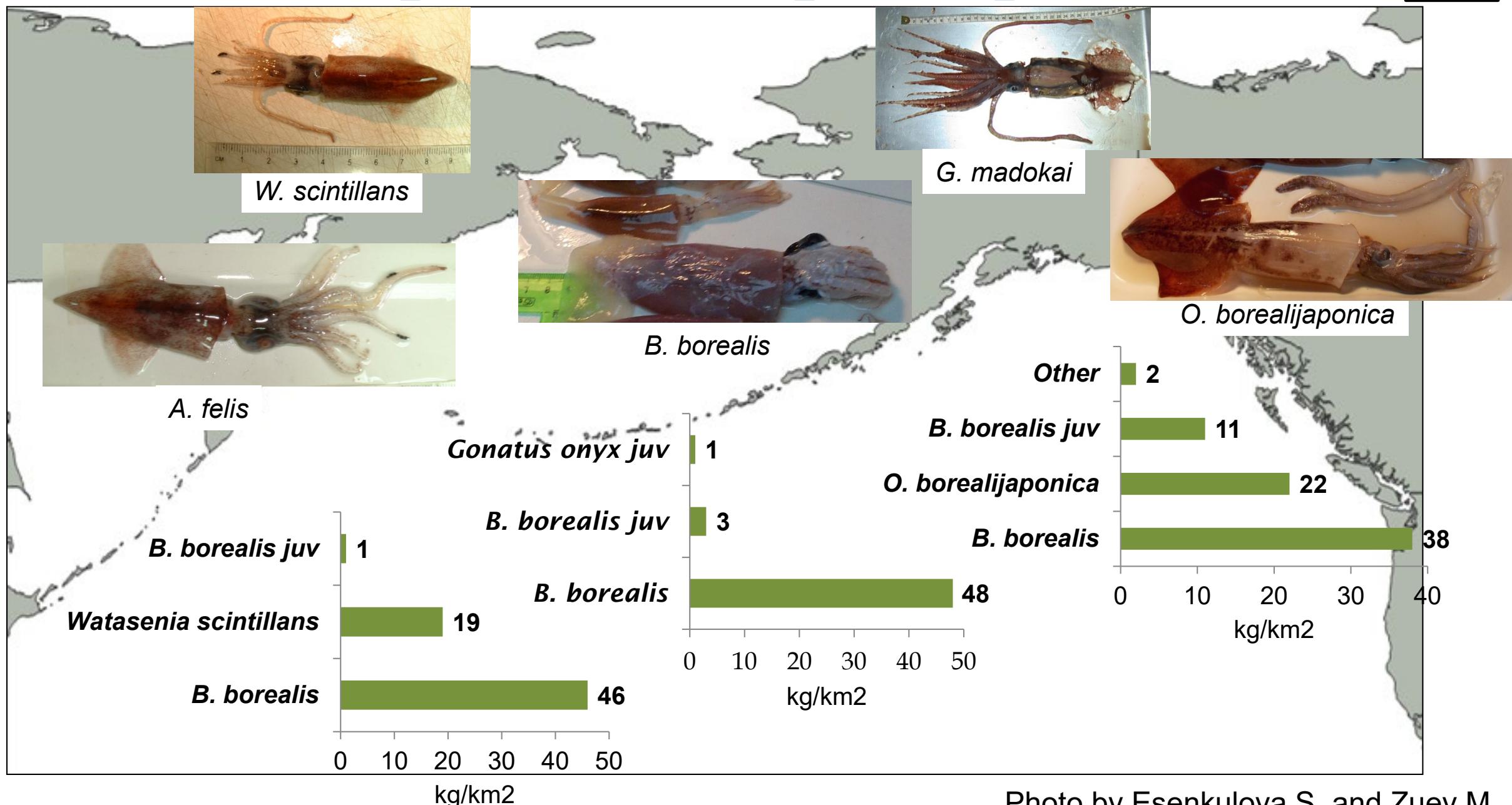
} Jellyfish  
} Squids  
} Pisces

} Jellyfish  
} Squids

# Composition of jellyfish species



# Composition of squids species



# Composition of fishes species

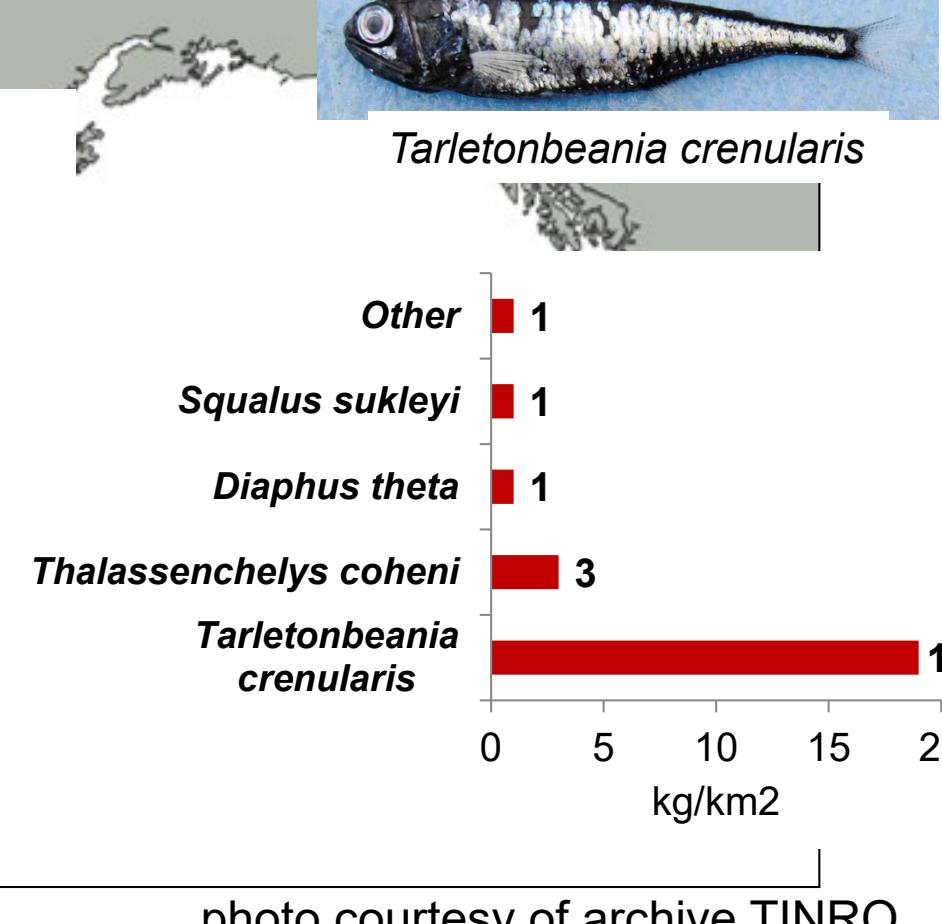
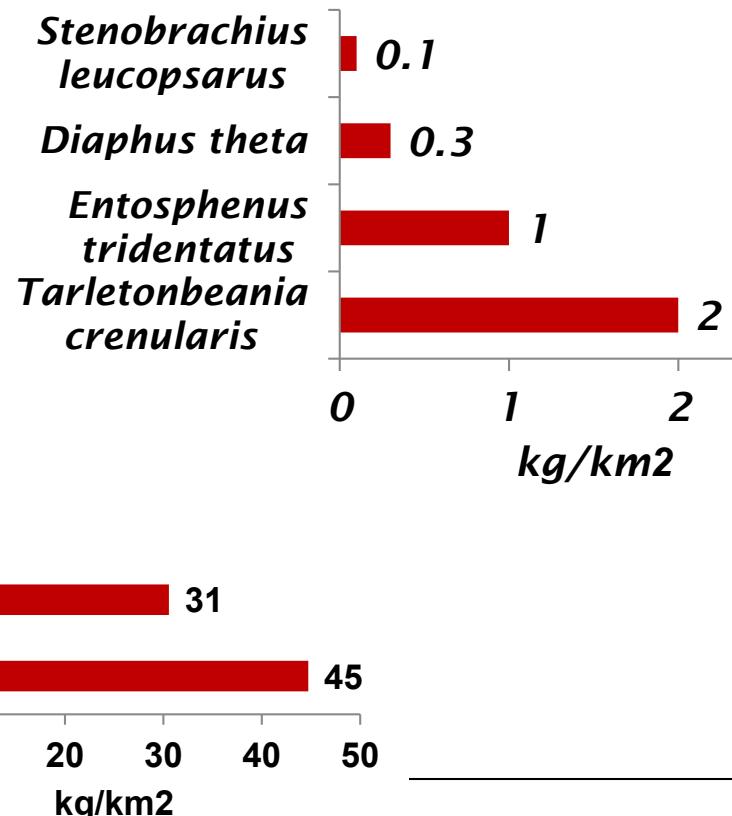
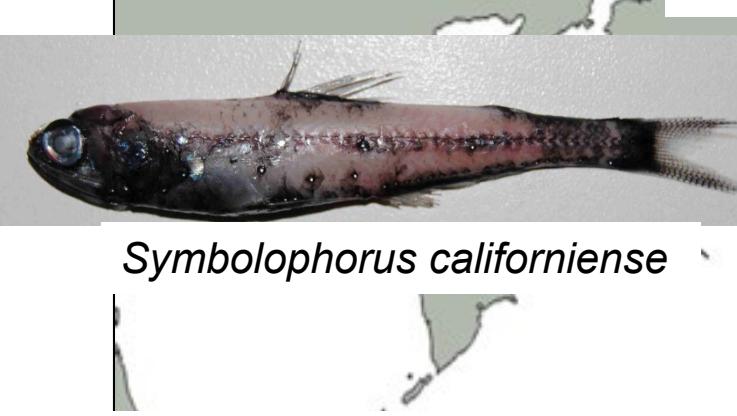
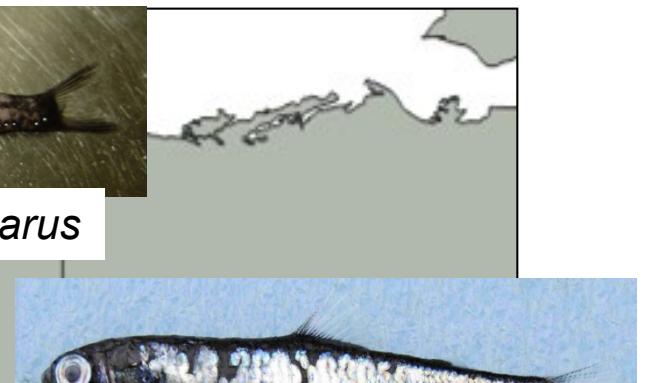
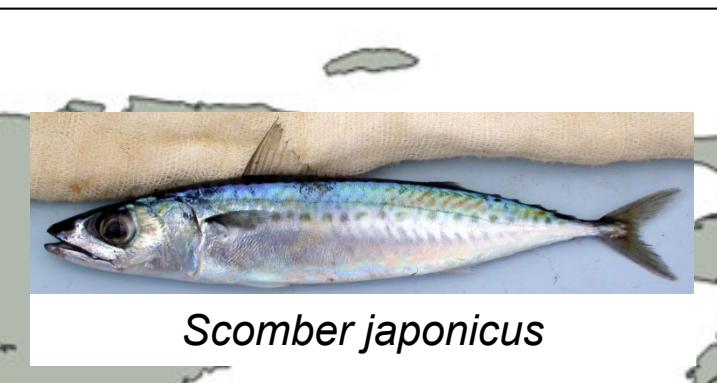
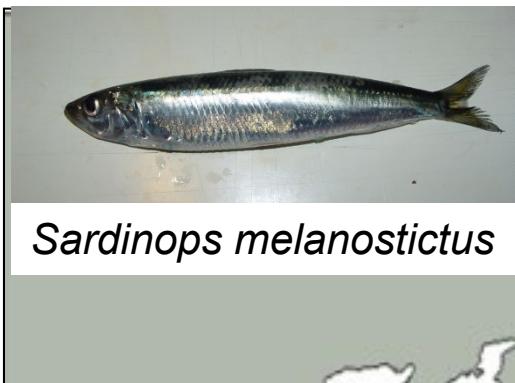
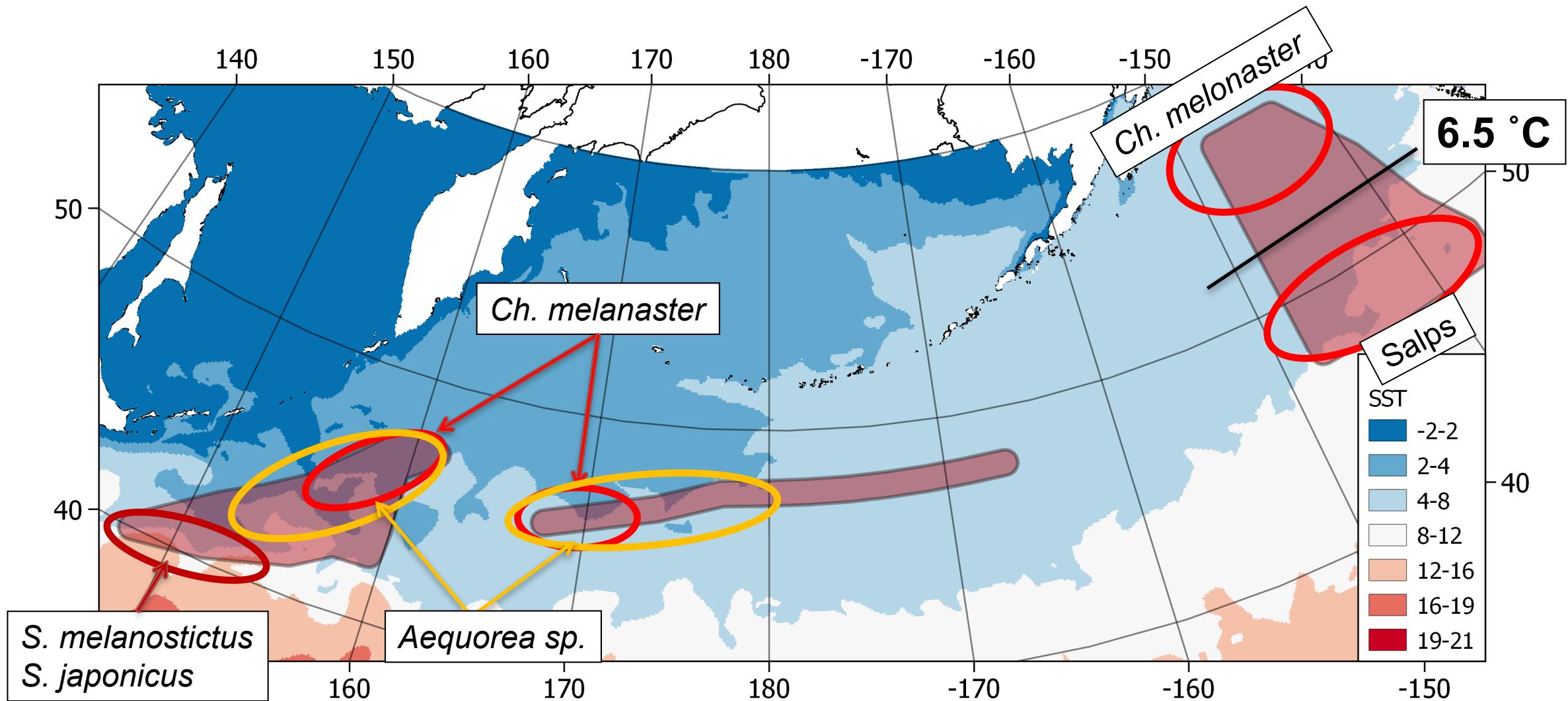
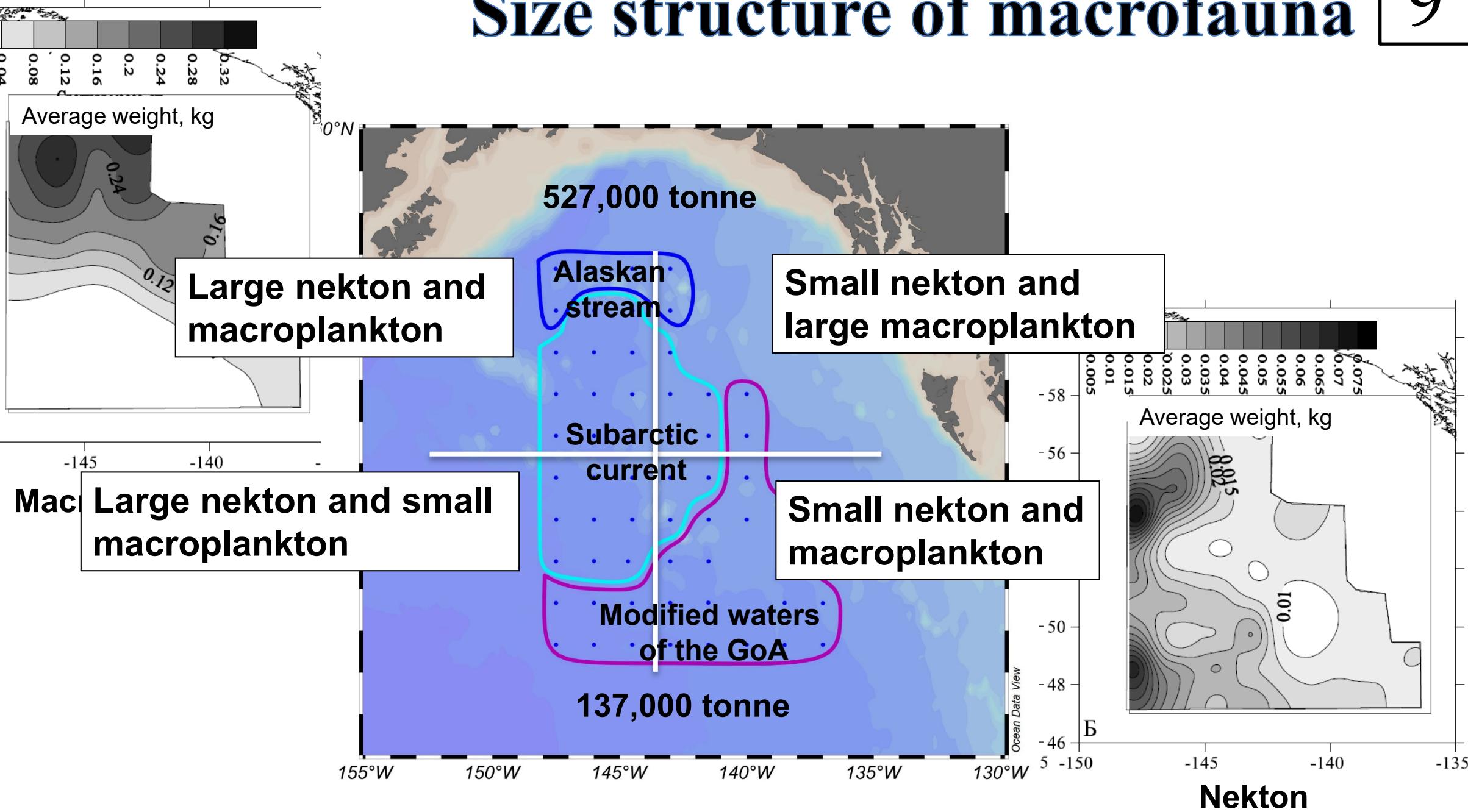


photo courtesy of archive TINRO

# Sea surface temperature



# Size structure of macrofauna



# Conclusion

- Macrozooplankton dominated in all areas. *Chrysaora melanaster* was dominant in the GoA and *Aequorea* sp. in NWPO and Aleutian waters;
- *Boreoteuthis borealis* was the most abundant squid (by biomass); Biomass of adults did not vary much, biomass of juveniles increased as the ship moved west to east;
- *Tarletonbeania crenularis* dominated among mesopelagic fish;
- The highest fish biodiversity was recorded in the GoA. It was probably due to a high number of sampling stations and variable water masses.

# THANK YOU!

