

4.3.2 Spatial distribution and biomasses

Text by E. Orlova, P. Dalpadado, T. Knutsen, I. Prokopchuk and A. Dolgov

Figures by P. Dalpadado

Horizontal distribution of mesoplankton in 2013 is shown in Figure 4.3.2.1. Average biomass of zooplankton in 2013 was below the long-term mean. However, distribution of biomass attributed to zones was typical. Maximum biomass (more than $10 \text{ g dry weight m}^{-2}$) was recorded within a relatively large area in the northeast. Minimal biomass ($2\text{-}6 \text{ g} \cdot \text{m}^{-2}$) was distributed relatively evenly over the rest of the area, and only a small area in the center between 70°N and 75°N having high biomass was prominent.

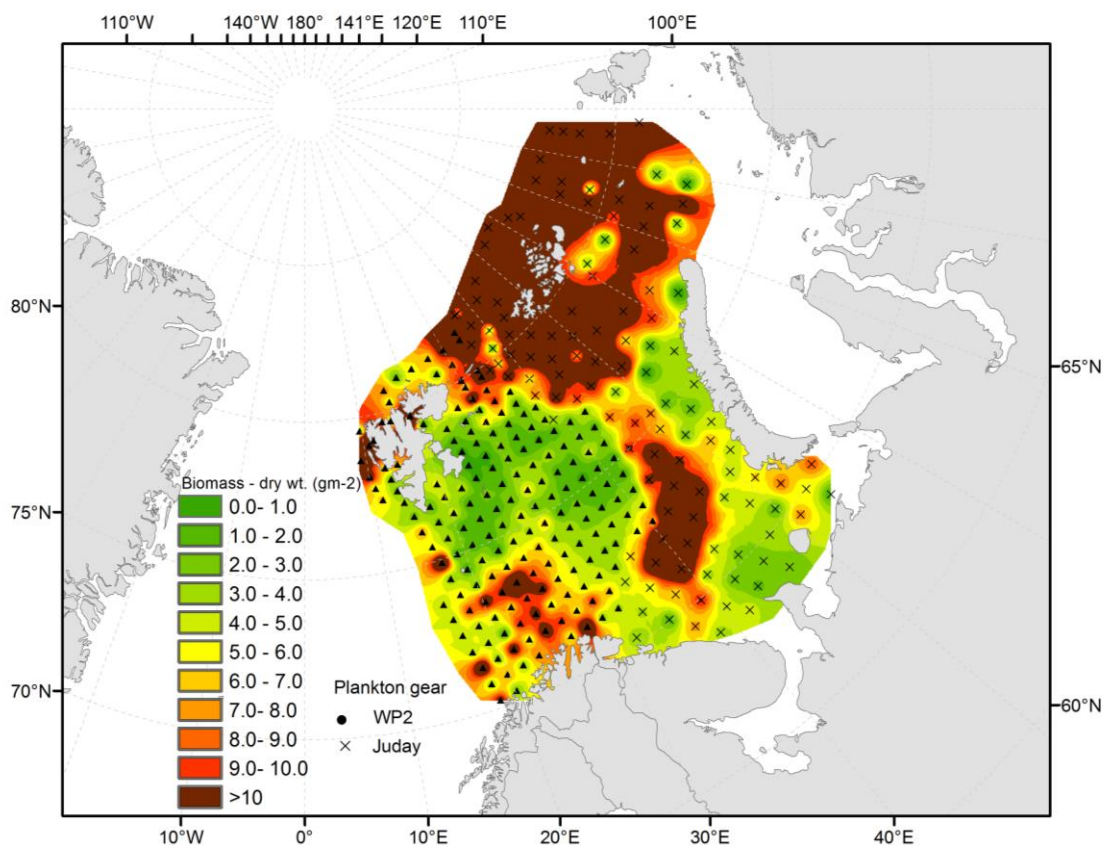


Figure 4.3.2.1 Distribution of zooplankton (dry weight, $\text{g} \cdot \text{m}^{-2}$) from bottom-0 m in 2013. Data based on Norwegian WP2 and Russian Juday net samples (IMR/PINRO)

According to the Norwegian data, average biomass of zooplankton in the western and central Barents Sea in 2013 was estimated at $5.2 \text{ g} \cdot \text{m}^{-2}$. It was well lower than in previous years (2006-2010) and close to that in 2011 when it also was very low ($5.9 \text{ g} \cdot \text{m}^{-2}$).

According to the Russian data, average biomass of mesozooplankton in the eastern and northeastern Barents Sea in 2013 was traditionally rather high, $10.1 \text{ g} \cdot \text{m}^{-2}$, and above the biomass in 2011-2012 ($7.7\text{-}8.8 \text{ g} \cdot \text{m}^{-2}$), however it was lower than that in 2010 ($11.2 \text{ g} \cdot \text{m}^{-2}$).

Aggregated Russian and Norwegian data suggest that average biomass of zooplankton within the entire area, due to high biomass in the northeast, was $7.6 \text{ g} \cdot \text{m}^{-2}$.