

Not too small to be overlooked: annual changes in *Oithona similis* abundance and copepodid structure in Adventfjorden (Isfjorden, Svalbard).

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Oithona similis is the most common cosmopolitan copepods inhabiting the World Ocean. Due to its very high abundance, flexible food strategy (omnivory) and high growth rate it plays an essential role in energy transfer in the marine pelagic food webs worldwide. However, the seasonal population dynamics of this small copepod is poorly known since it is severely underestimated in standard zooplankton nets of 180-200 µm mesh size. Here we present results from two years of bi-weekly sampling with a 60 µm closing WP2 net in 2012 and 2013 (two depth strata, 79 samples) in Adventfjorden (Isfjorden, Spitsbergen). The peak abundances of this species were observed in September (49% and 46 % of the total zooplankton community) in 2012 and 2013, respectively. The younger part of the population (copepodid stages CI-CIII) aggregated in upper waters and dominated in autumn in 2012 and in summer in 2013, whereas older copepodid stages (CIV-CVI) occurred mainly in deeper layers and outnumbered the younger population in spring.

The importance of small *O. similis* in the European Arctic may be even more important than the larger species such as *Calanus* in annual terms. Nevertheless it can easily be overlooked, either due to the lack of annual sampling programmes to describe the entire seasonal cycle or due to sampling procedures using most commonly too coarse nets. Our results underline the need for continuous sampling with small mesh nets throughout the year in order to determine the entire mesozooplankton community and its seasonal succession in Arctic waters.