

Not too small to be overlooked:

annual changes in *Oithona similis* abundance and copepodid structure in Adventfjorden (Isfjorden, Svalbard)



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Is *Oithona* the most important copepod in the world's oceans?

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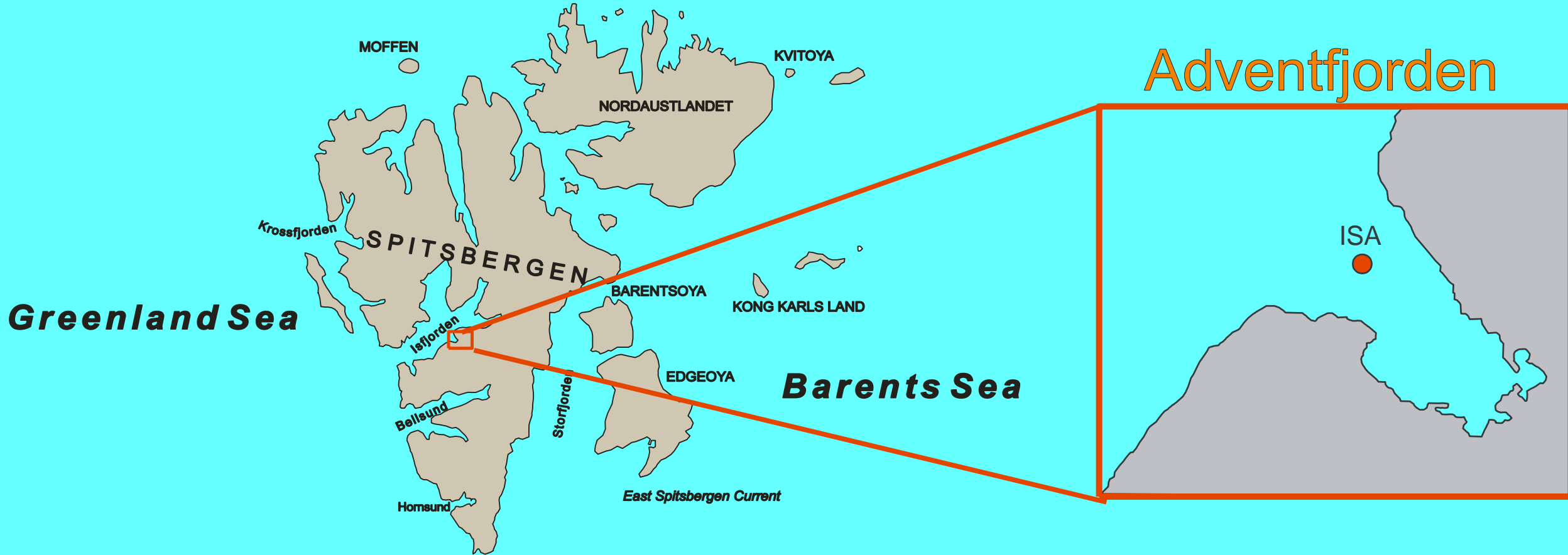
Introduction

Materials and methods

Results

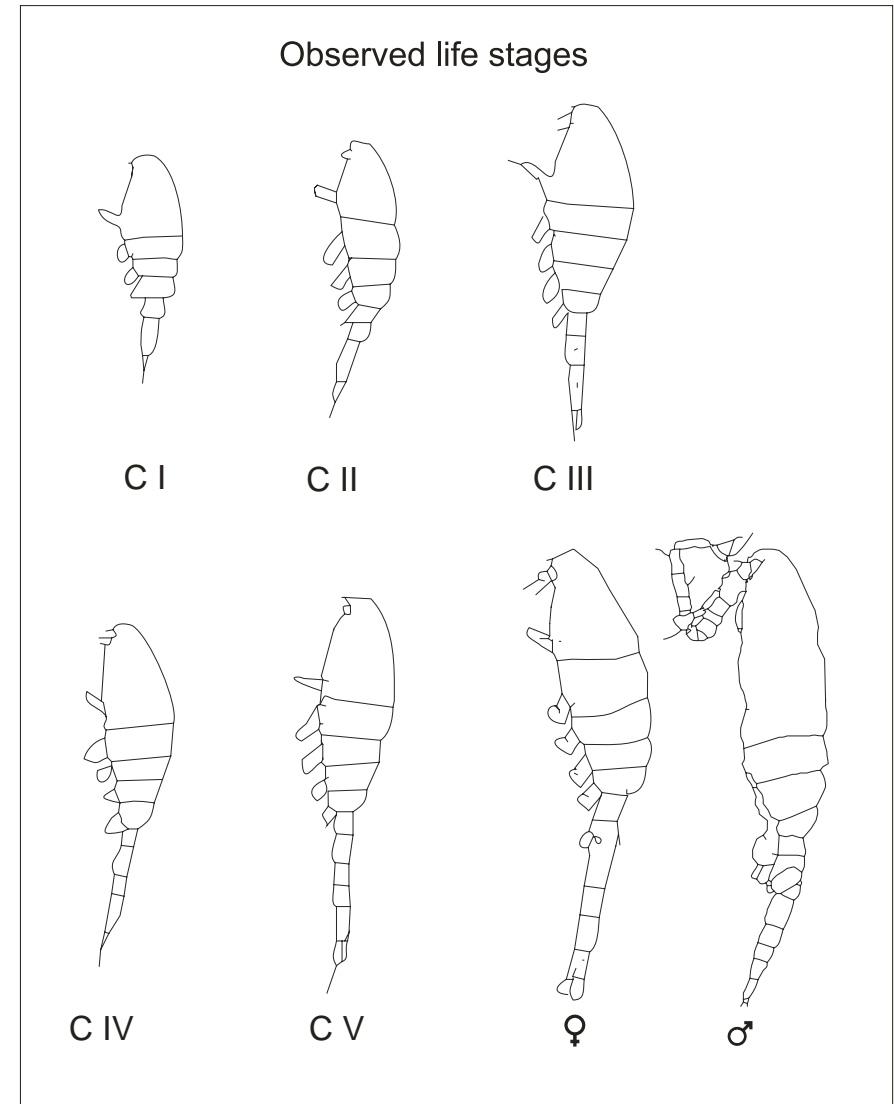
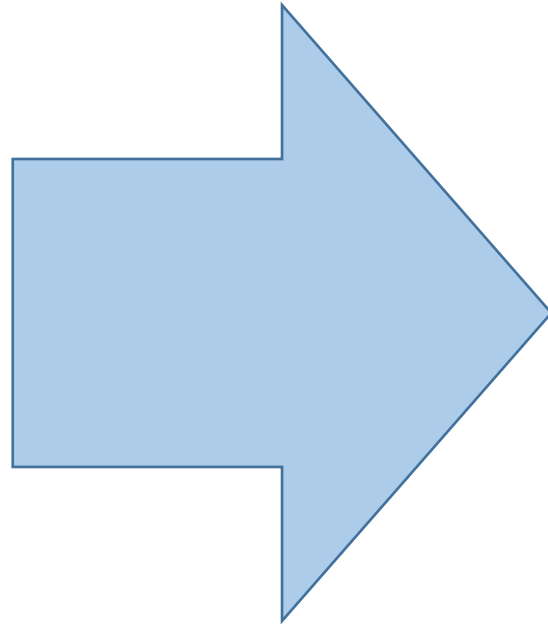
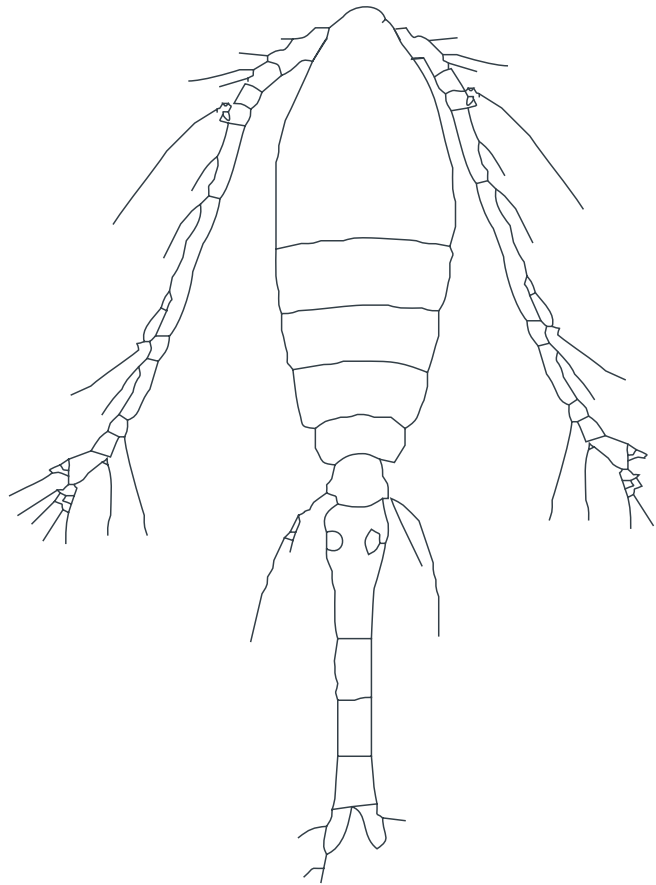
Conclusions

Studied area



„Commonly observed” *Oithona similis*

Copepodid structure of *Oithona similis*



Zooplankton sampling collection

Sampling gear



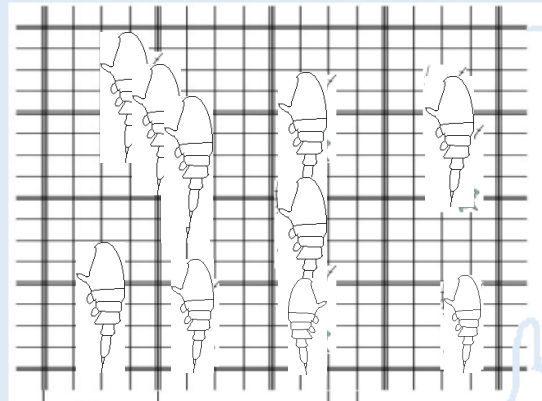
WP2 net
60 µm mesh size

Samples collected: January 2012-October 2013

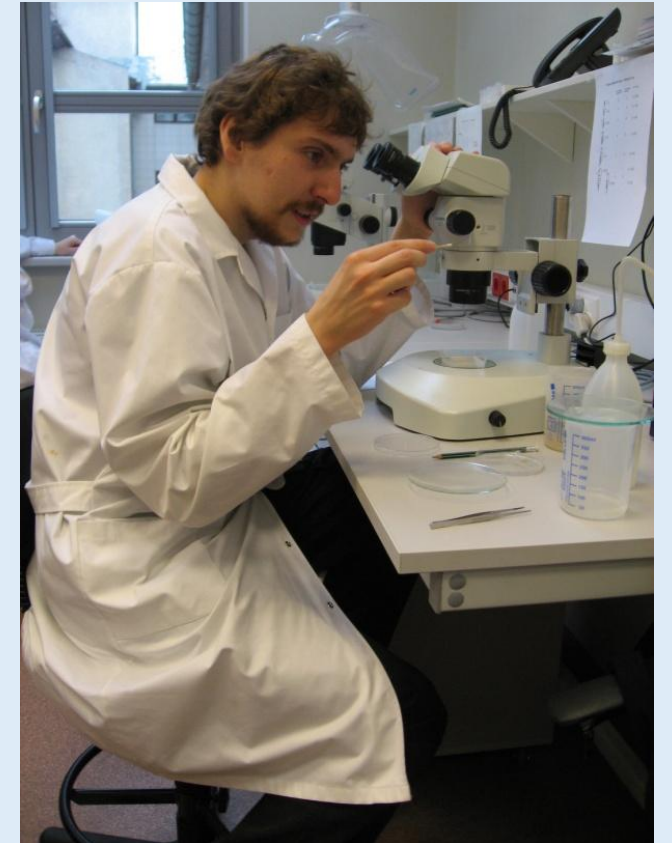
Two depth layers: 65-25 m, 25-0m

At least two samples per month

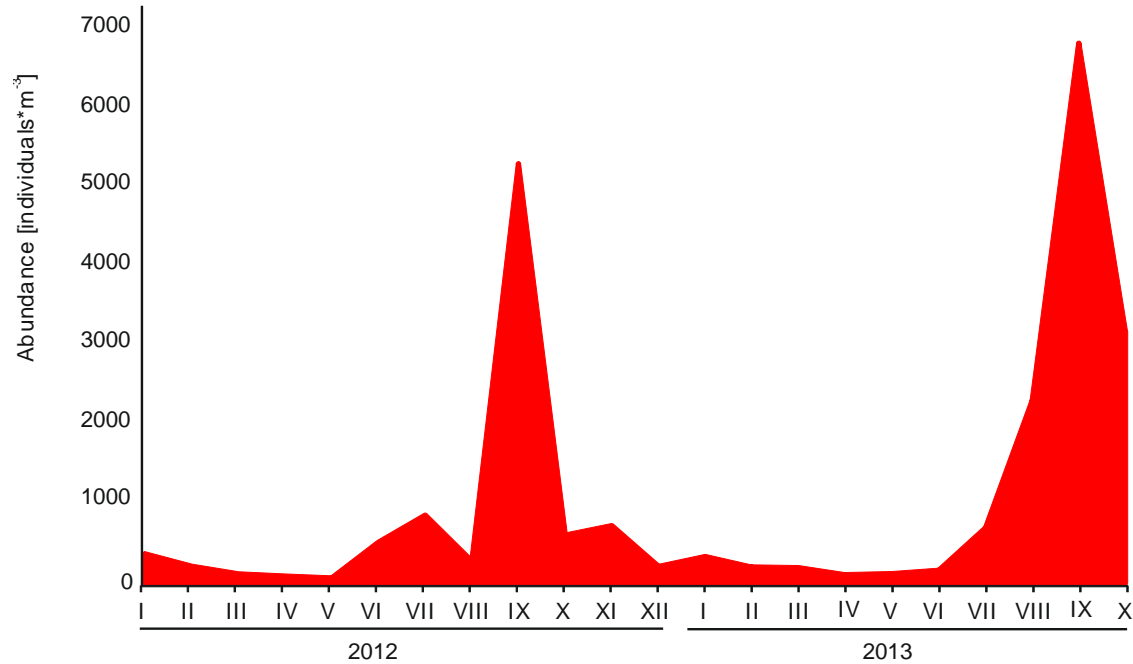
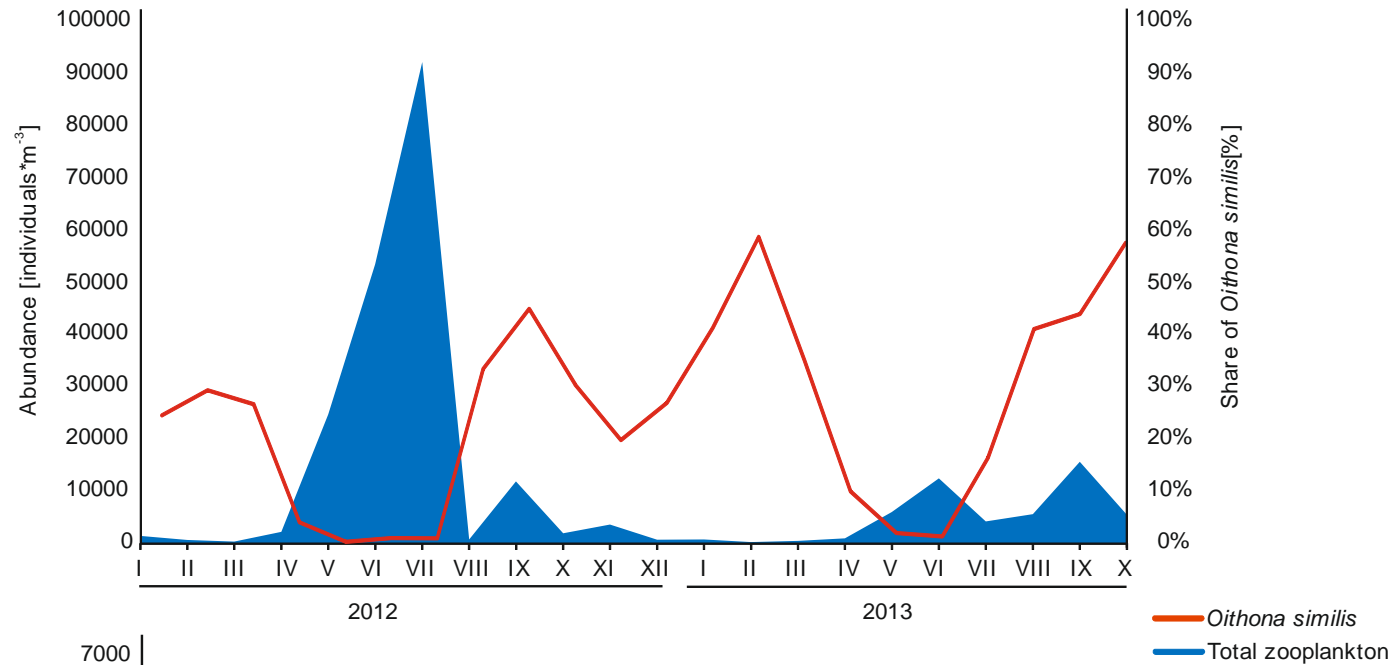
Most frequently sampled month: May



Laboratory work

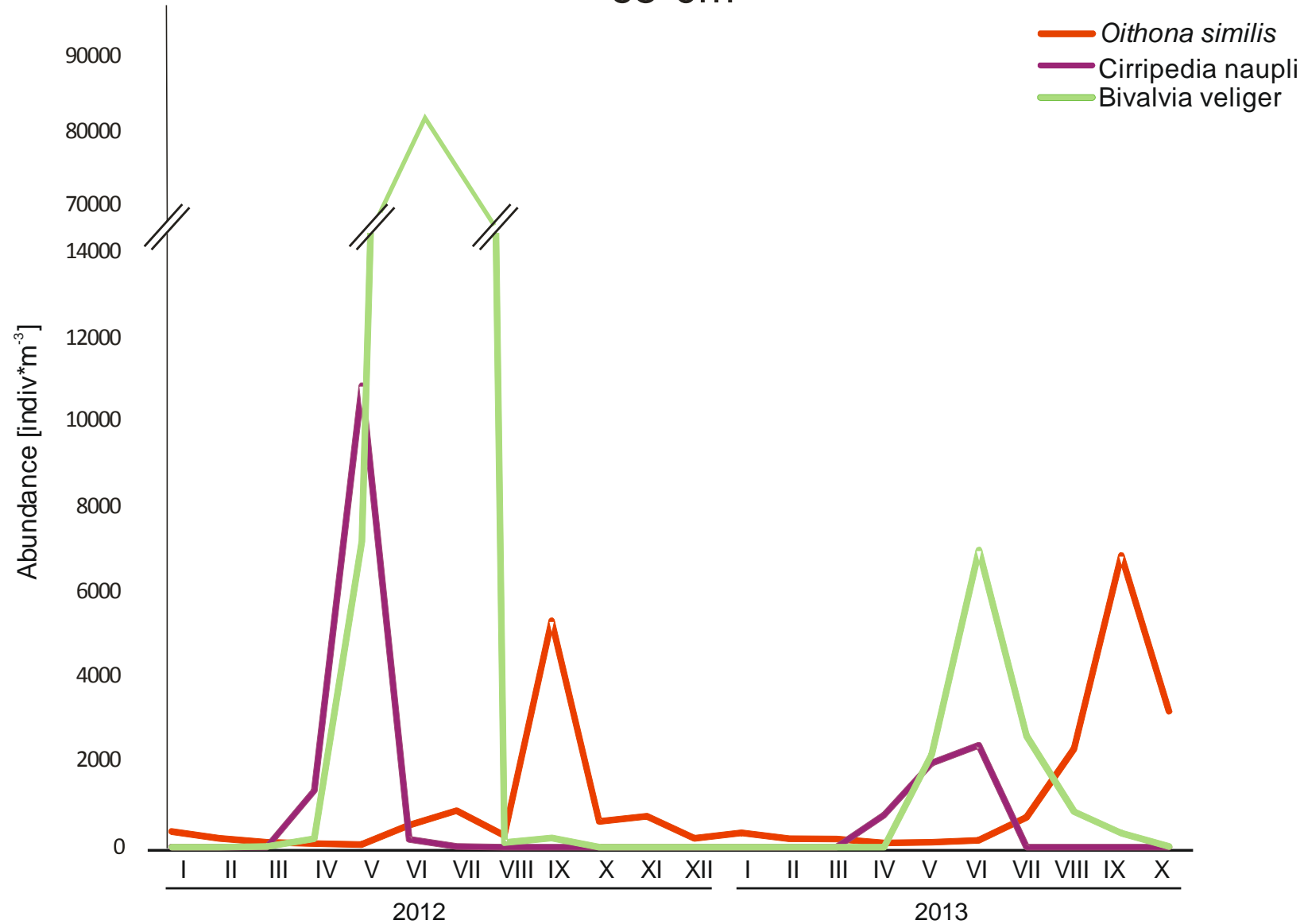


Total zooplankton abundance vs. *O. similis* share

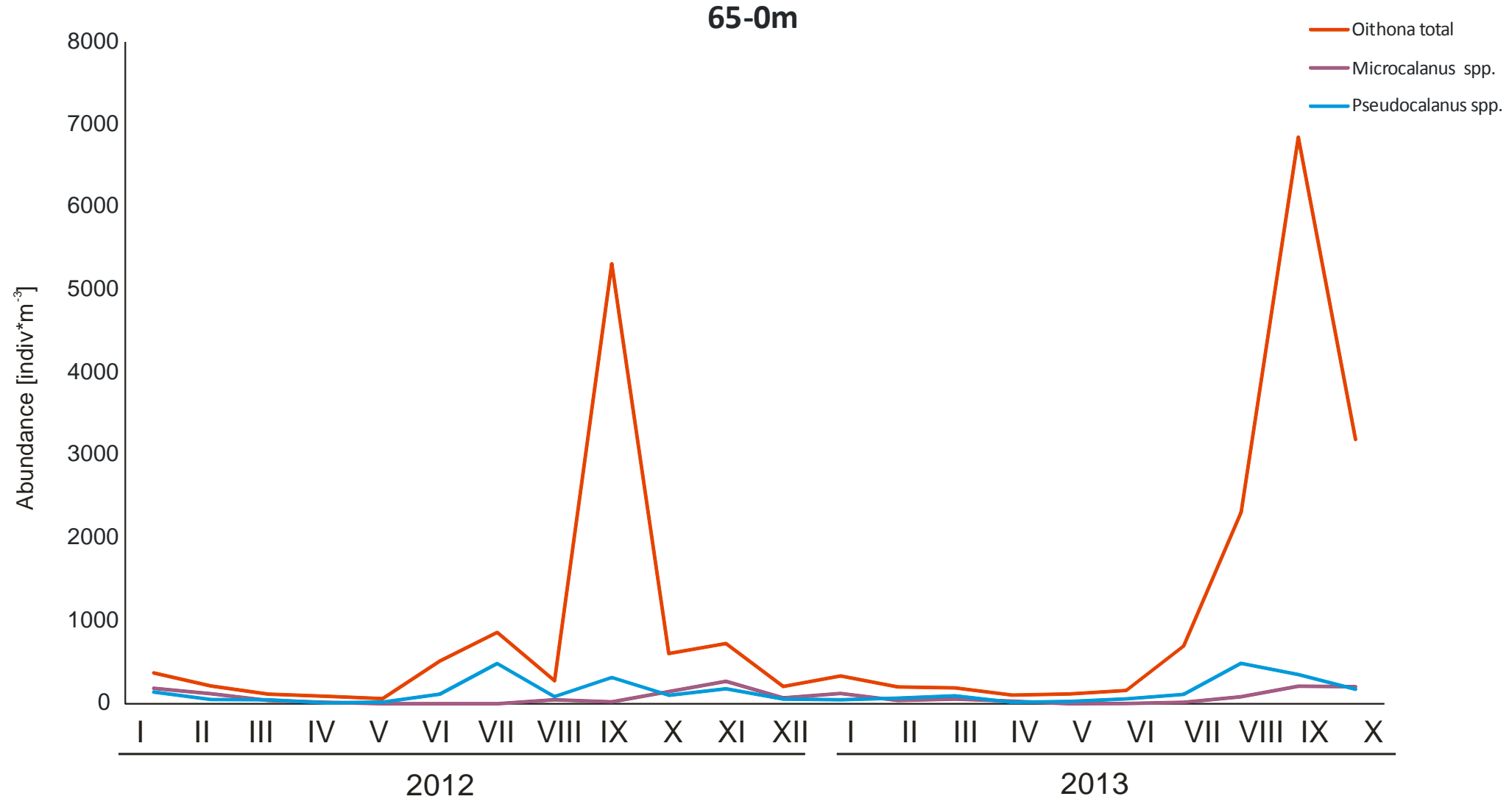


Oithona similis vs. dominants

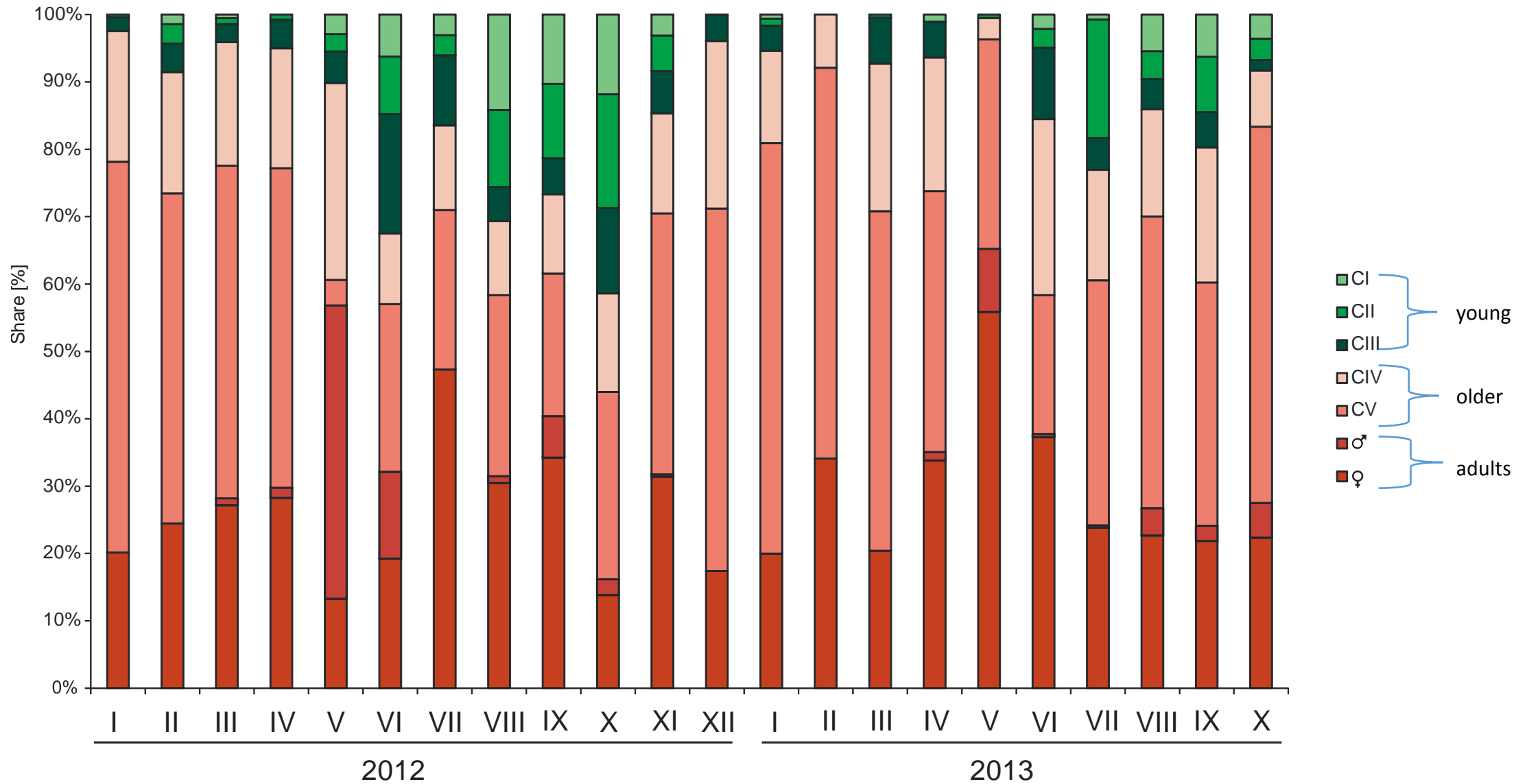
65-0m



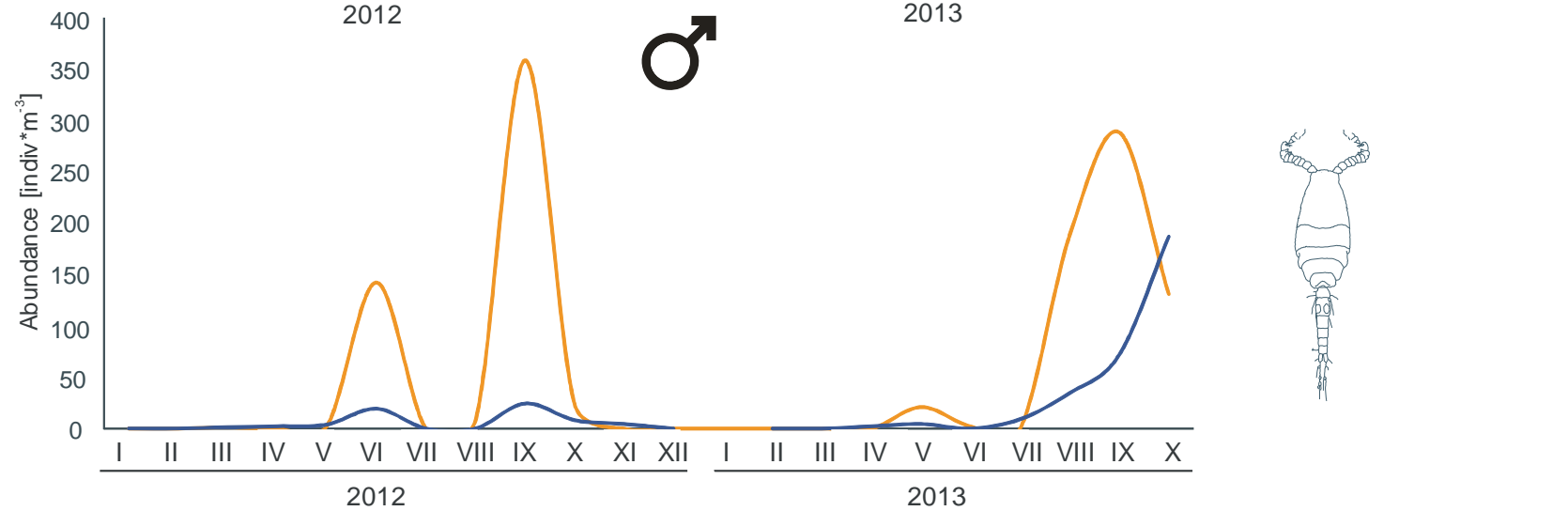
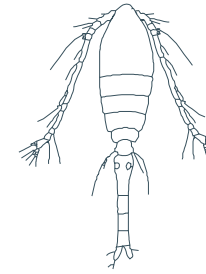
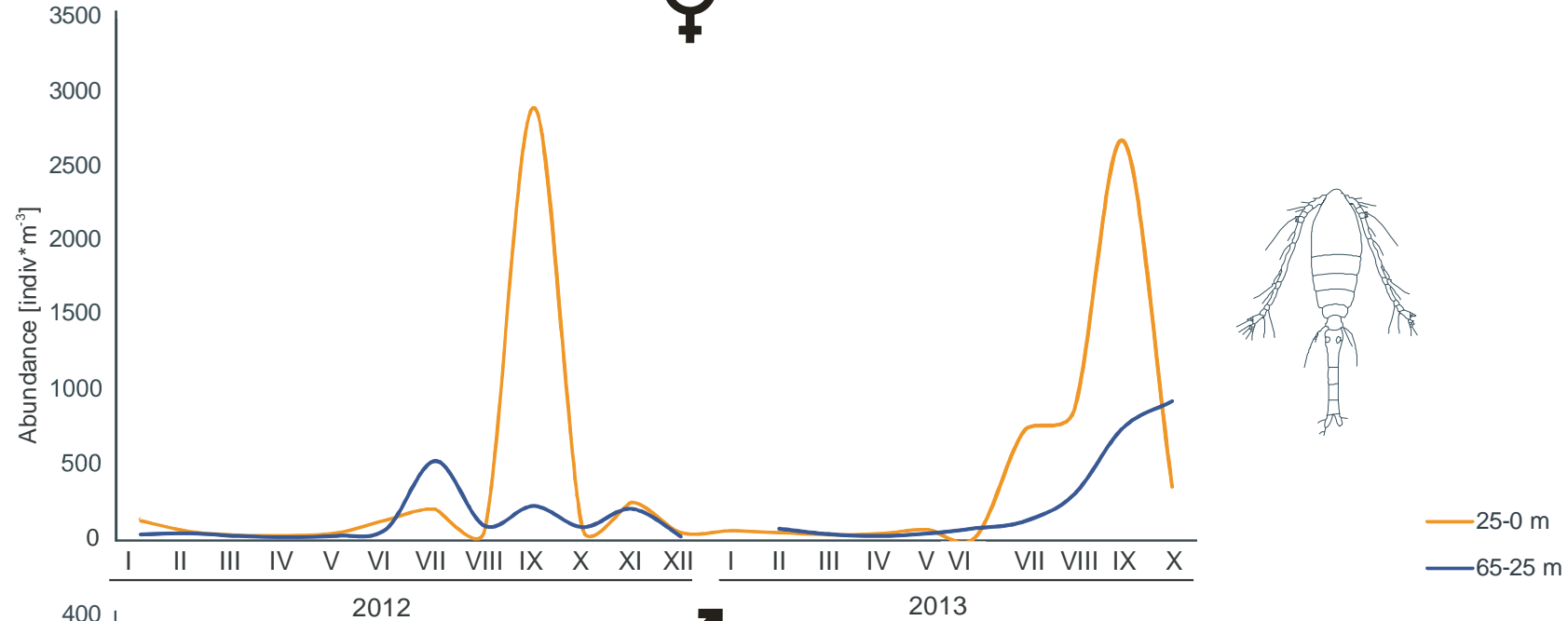
Oithona similis vs. other small copepods



Copepodid structure of *Oithona similis*

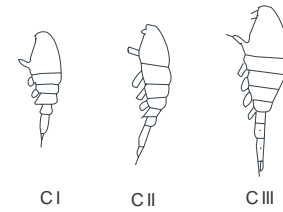
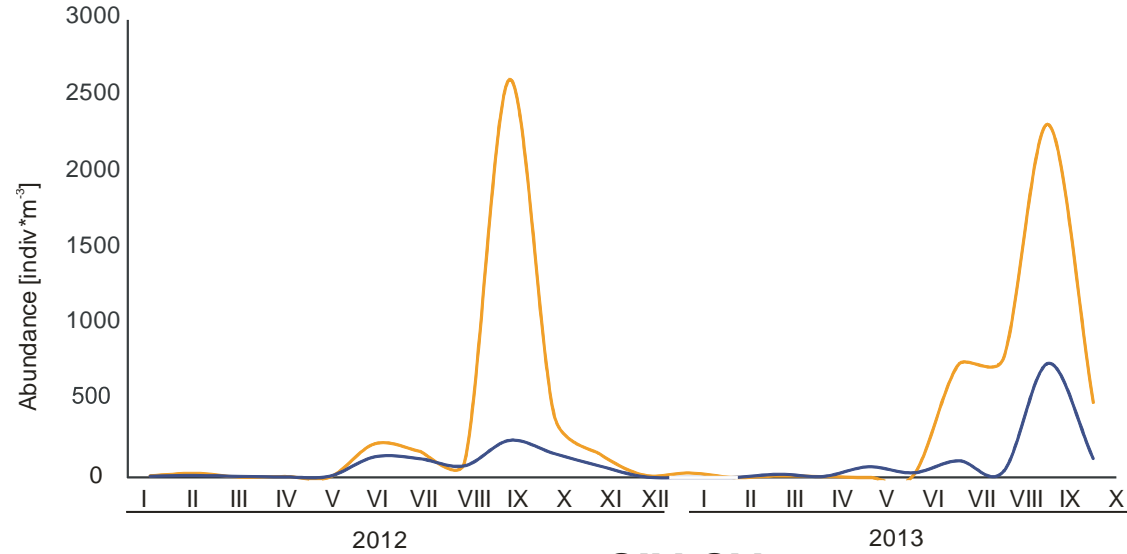


Abundance in two depth layers

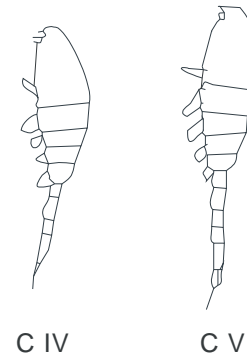
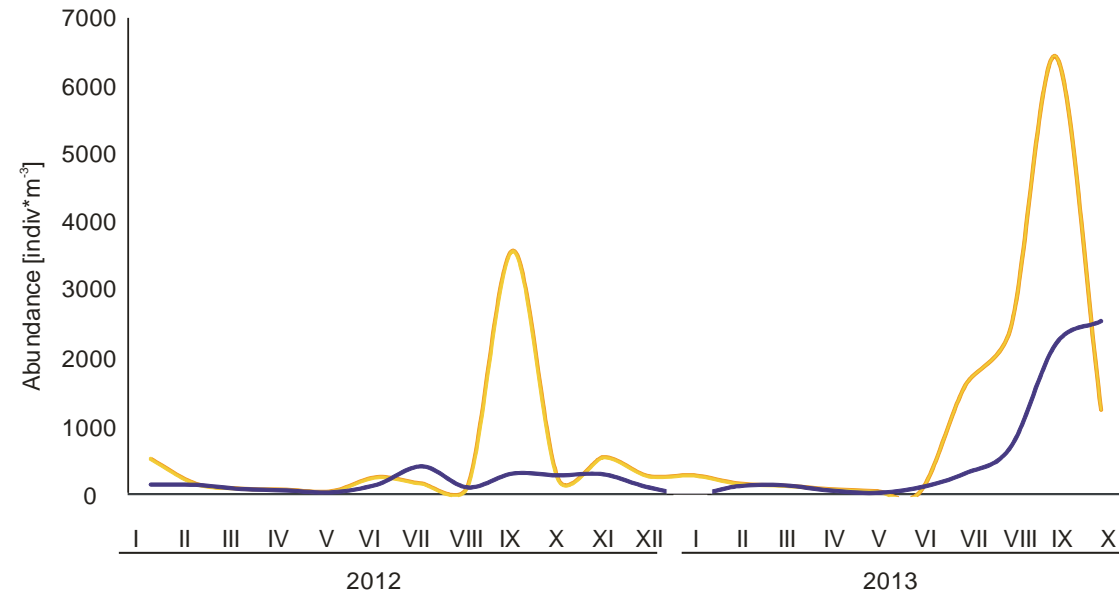


Abundance in two depth layers

CI-CIII



CIV-CV



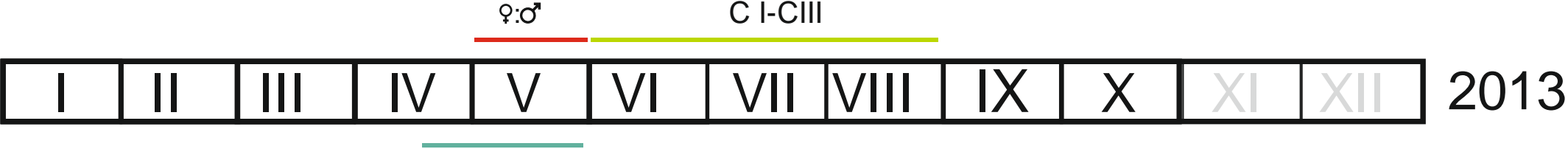
Mean population stage

$$\bar{S} = \frac{N_{CI} * 1 + N_{CII} * 2 + N_{CIII} * 3 + N_{CIV} * 4 + N_{CV} * 5 + N_{CVI} * 6}{N_{CI} + N_{CII} + N_{CIII} + N_{CIV} + N_{CV} + N_{CVI}}$$

N-number of particular copepodid stage

Marin
1987

Calendar of *Oithona similis* life cycle



- low ♀:♂ ratio (potential „pre-breeding season”)
- the lowest „mean population stage”(S)
- phytoplankton bloom

Take home message

REPEATED, clear seasonal pattern in *Oithona similis* copepodid structure in two years