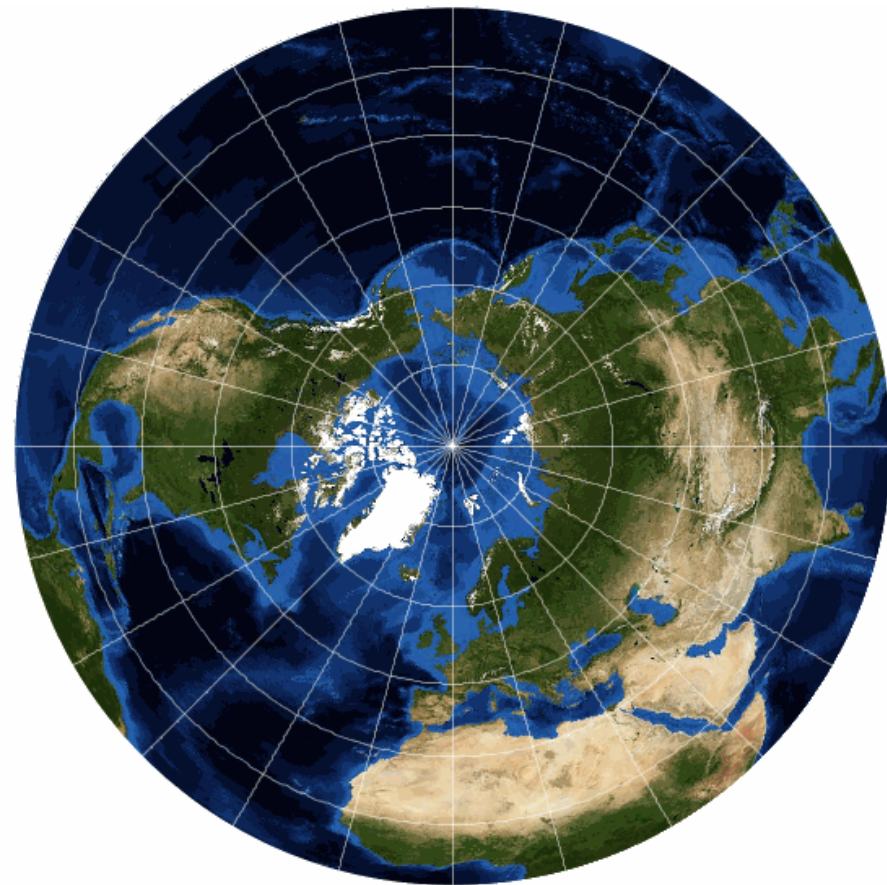


# Bathymetric patterns in Bryozoa zooid size on shelf and continental slope off Iceland

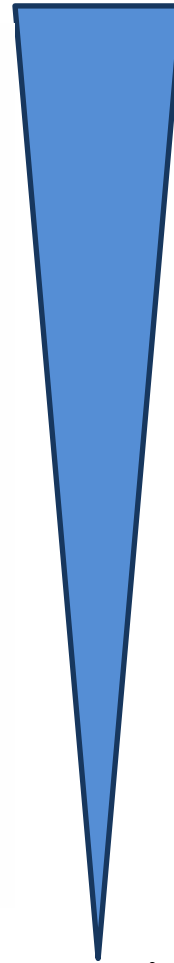
Anna Stępień, Piotr Kukliński, Maria Włodarska  
Kowalczyk, Małgorzata Krzeminska, Gudmundur  
Gudmundsson



# Bergmann's rule



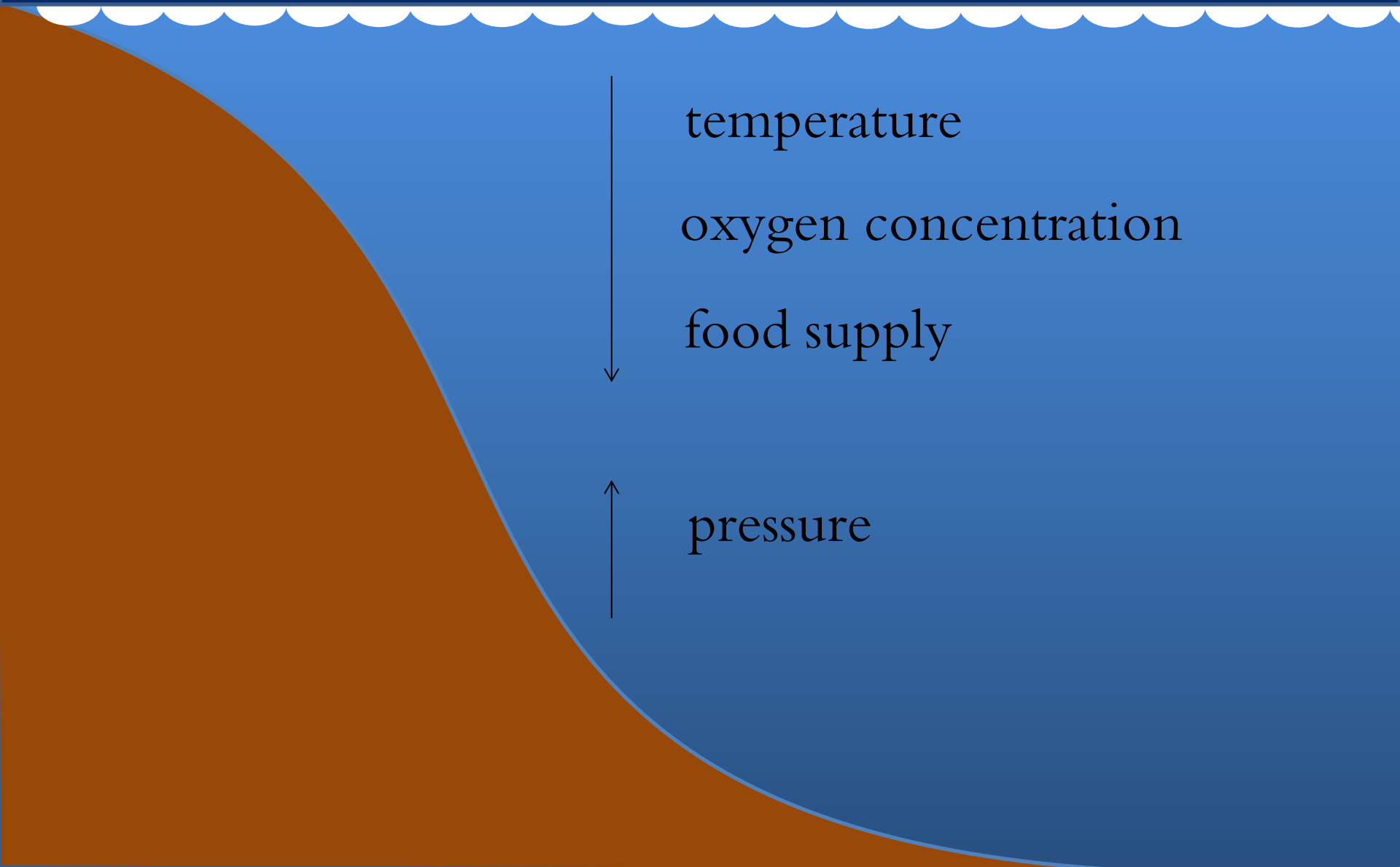
arctic



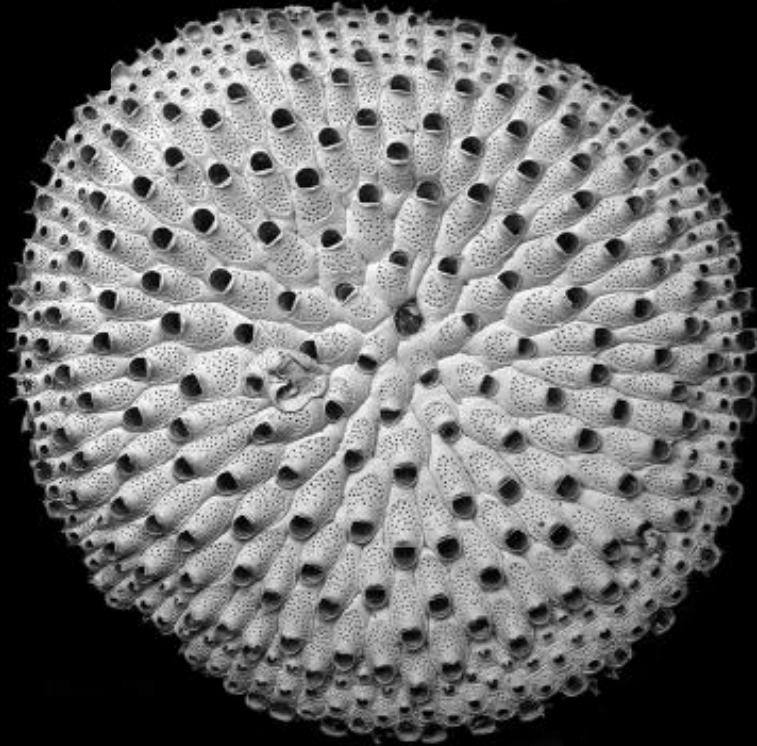
tropic



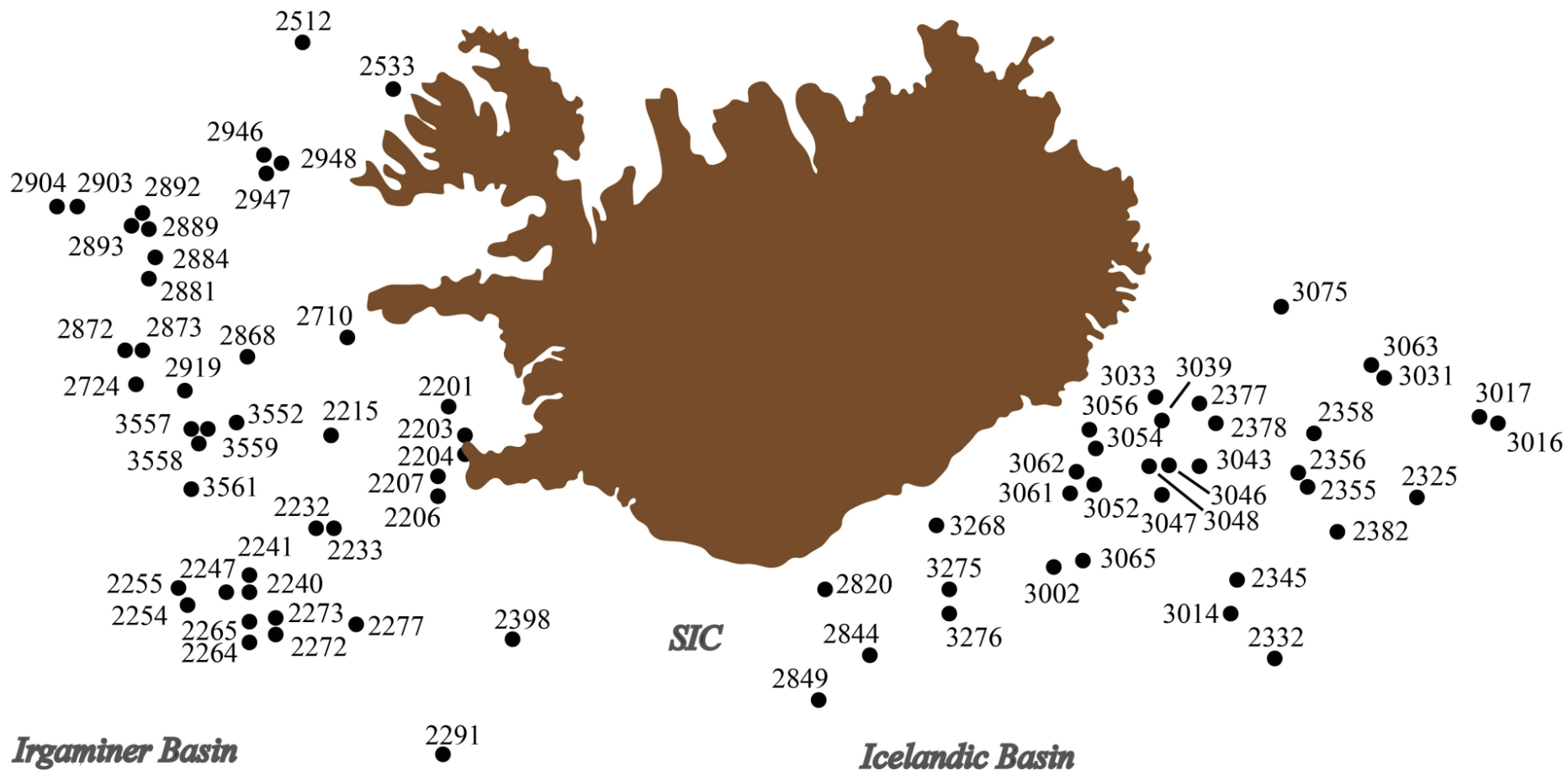
# Bathymetric trends



# Bryozoa



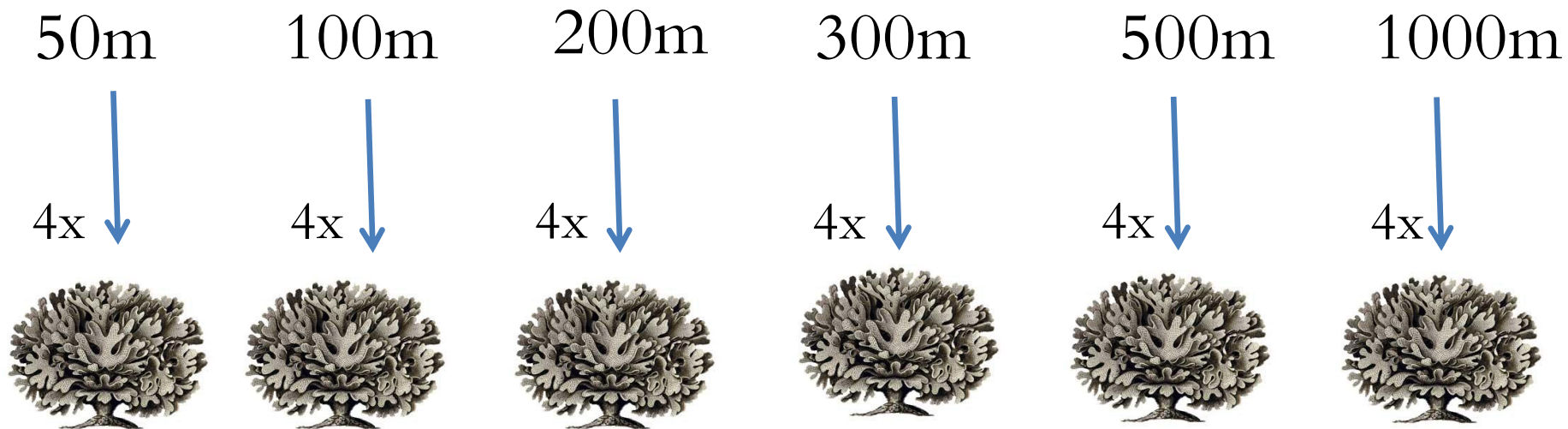
# Study area



3590

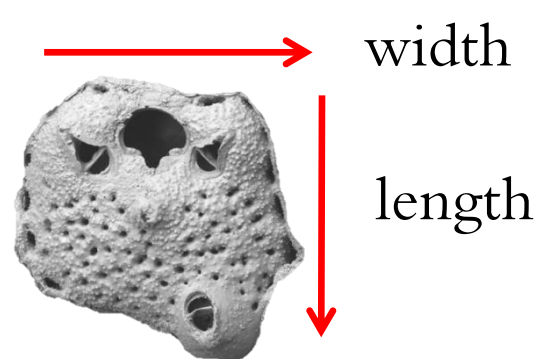
# Methods

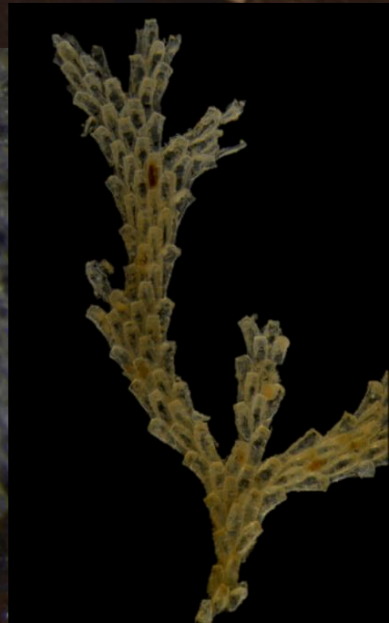
12 species from six depth zones



At least 4 colonies at each depth zone

20 zooids from each colony





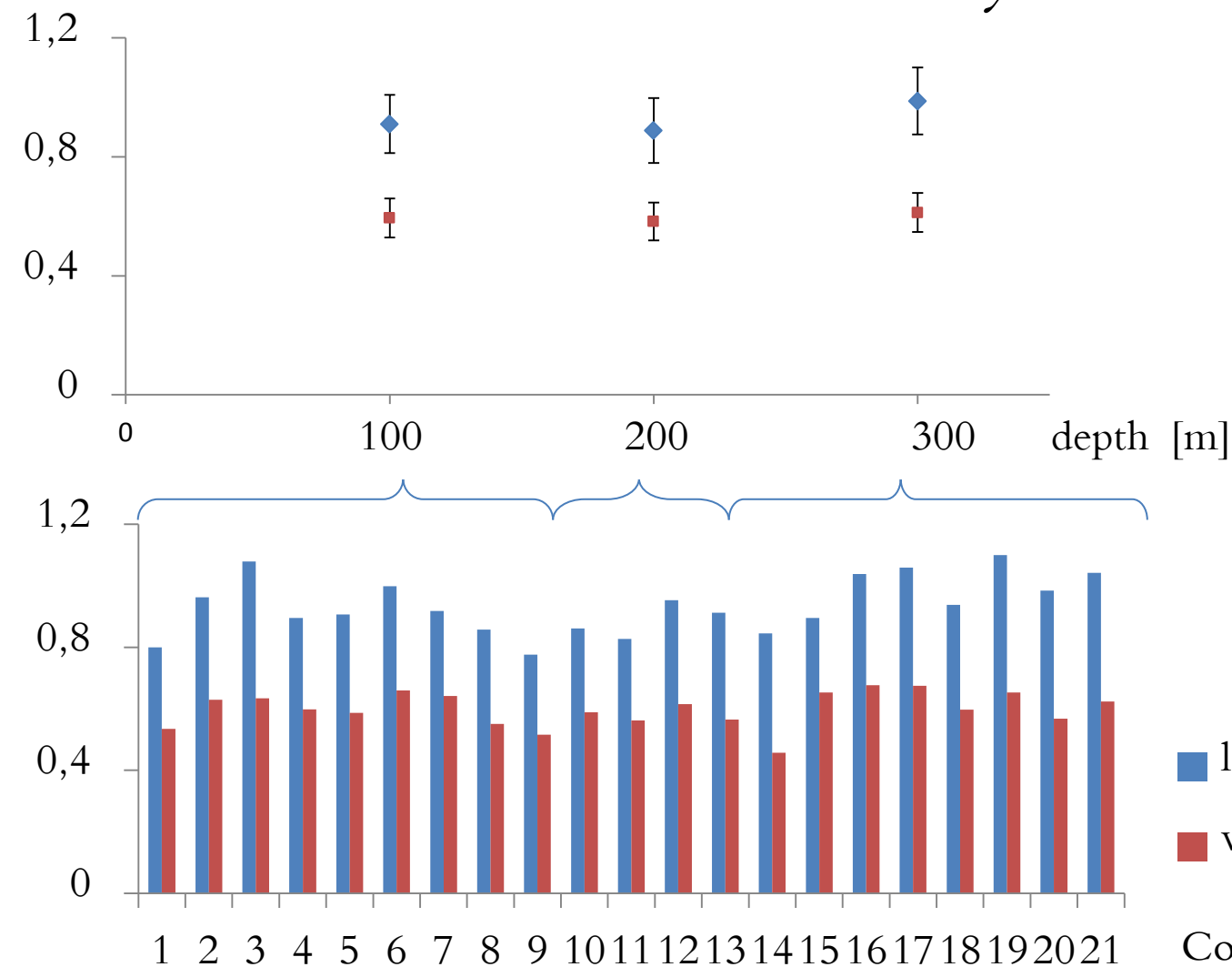


# Results

## *Escharella abyssicola*



$P=0.16$   
Pseudo-F = 1.54



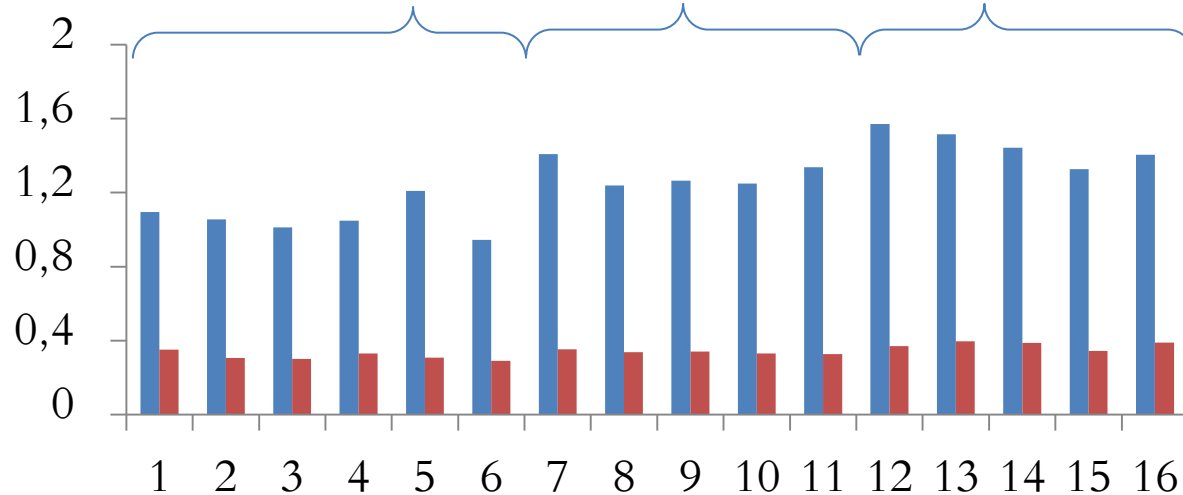
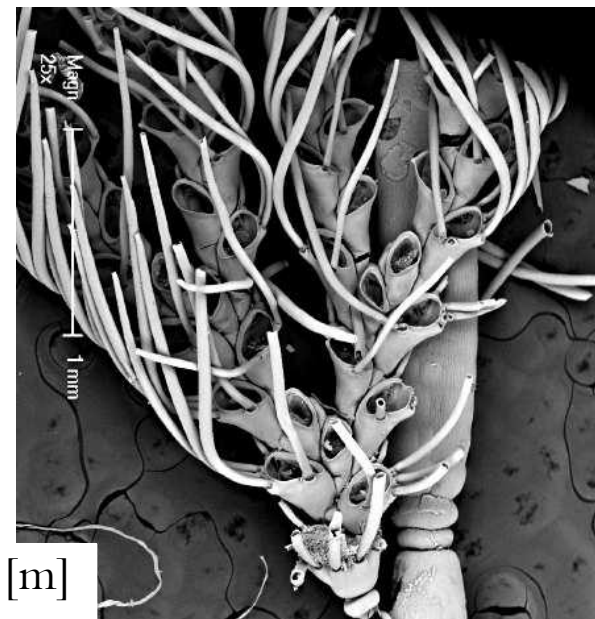
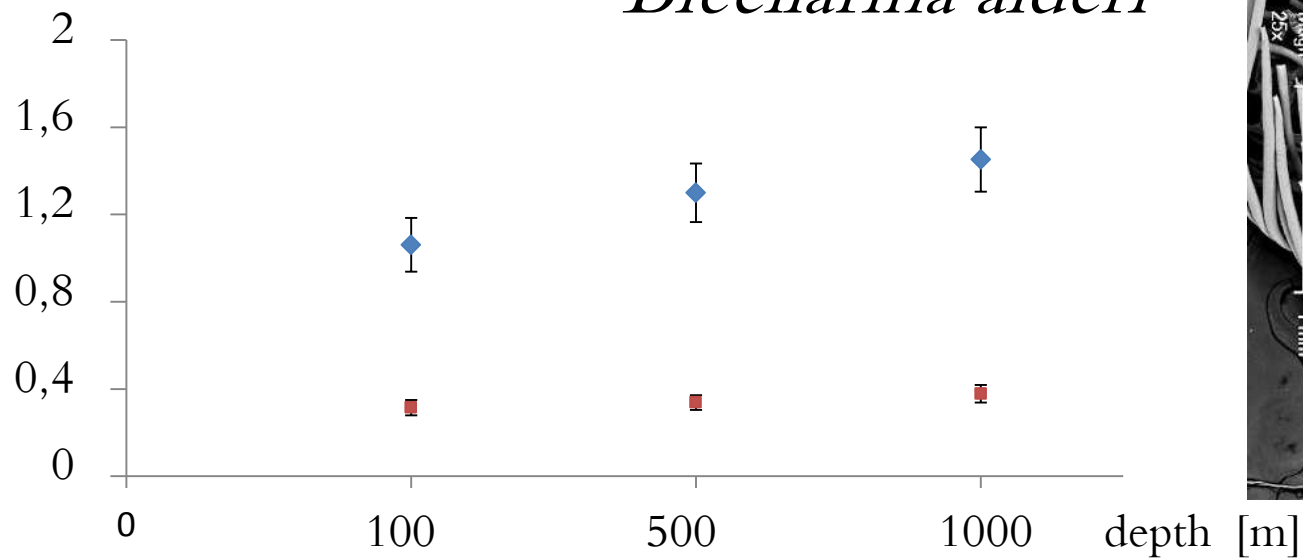
length

width

Colonies number

# Results

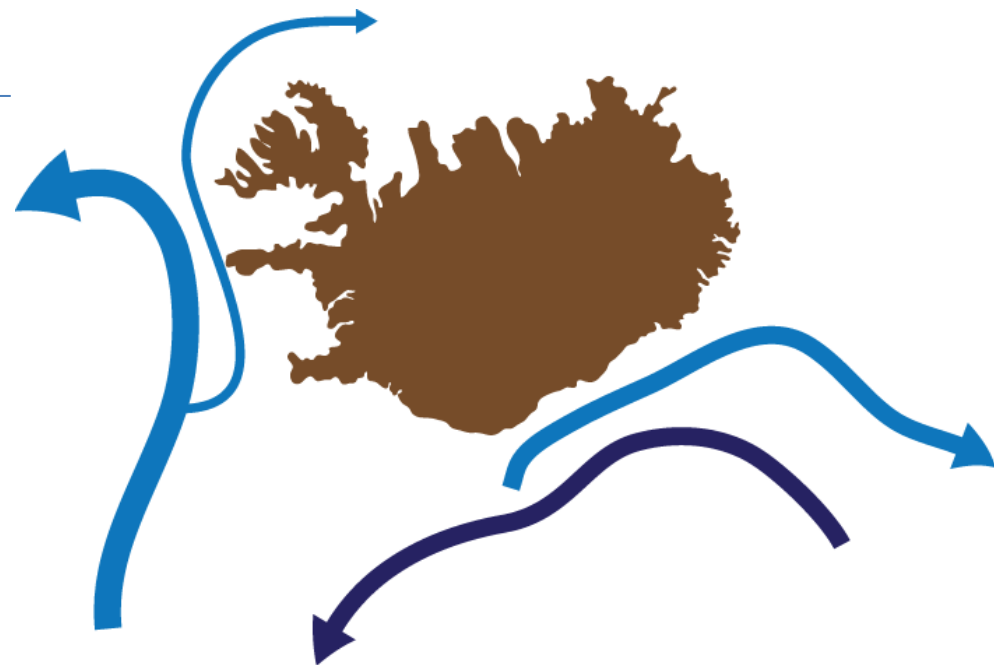
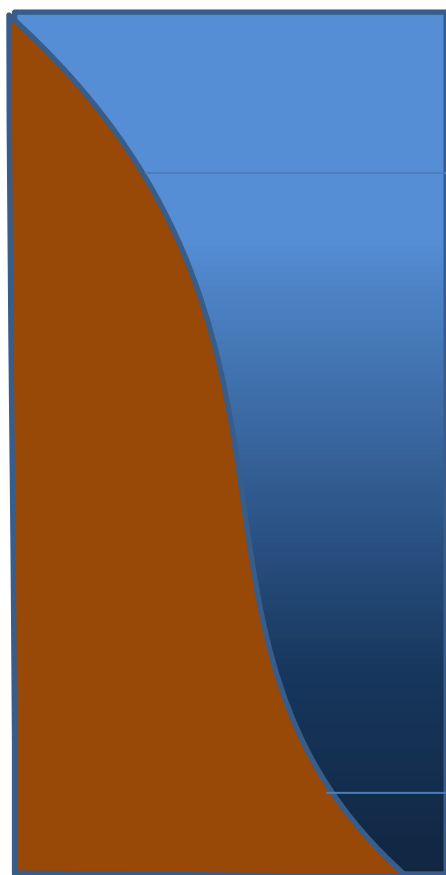
## *Bicellarina alderi*



$P=0.002$   
Pseudo-F = 11.69

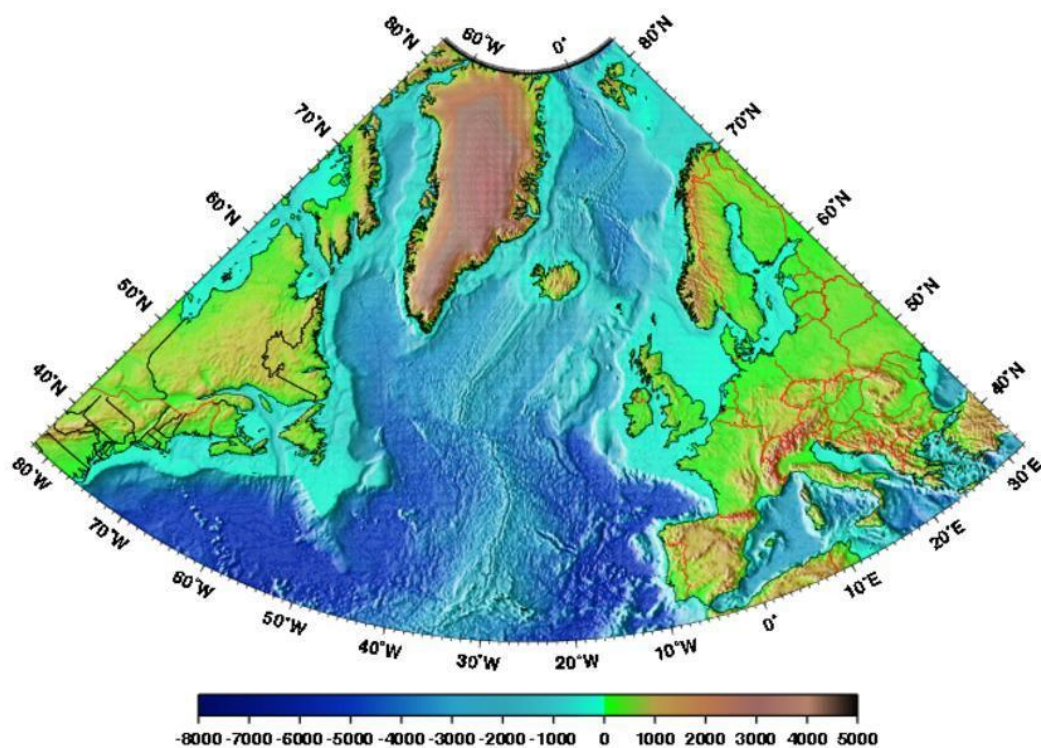
■ length  
■ width

# Discussion



Decrease of the temperature too weak  
to observe the significant size shift

Specific submarine topography in waters around Iceland



Inverse distribution of food

# Discussion



VS



# Conclusion

- Lack of general pattern in bryozoan zooid size
- Zooid size is genetically determined
- Ability to increase or decrease in different environmental factors limited
- Size restricted by local factors