Where is *Pecten maximus* growth the greatest?

Why and Where

I investigated population composition and shell growth for three wild populations of the scallop *P.maximus*, sampled from locations along a latitudinal gradient at **Dønna north**, **Dønna som h** and **Frøya**. By analyzing shell-height and annual growth I hope to answer the question; which location is more suitable for commercial scallop production?

What and How

Scallop shell growth occurs during the growth season by daily formation of microstructures called **striae** along the growth axis on the outer edge of the shell. In winter months the length of these striae are significantly shorter than the spring and summer months. This creates clearly visable **Winter-rings** (•). Annual growth corresponds to the length of the **Growth-zones** (1) that occure between these winter rings. **Shell height** (1) is the total length of the shell from **Umbro** (-) to the outer edge.



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Figure.1 Number of *P.maximus* individuals observed with a particular number of growth-zones on their shell at the time of sampling, for the three populations.



Figure.2 Shell-height (mean ± stander deviation) for all *P.maximus* individuals observed with a particular number of growth-zones on their shell at the time of sampling, for the three populations.

Dønna sør

Frøya

Dønna north	Dønna south	Frøya	
94	55	160	n
12-8m	18-14m	20-15m	depth
900m ²	400m ²	NA	area
0.1044	0.1375	NA	density

Table.1 Number of individuals (n), depth, area and density for the three populations. Area and density was not registered for Frøya.



66° 6′ 24″ N

Frøya

63° 43′ 21″ N



Figure.3 Shell-height growth (mean ± stander deviation) for the growth-zones of *P.maximus* individuals where the particular growth-zone appeared, for the three populations.



Poster nr: 16

Dønna nord

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My data seems to show that Dønna south had an issue with recruitment for certain years. Dønna north has a higher total shellheight for the first five growth-zones and a higher shell-height growth in the second growth-zone. Frøya has a higher total shellheight from the sixth to the tenth growthzones and higher shell-height growth for the first growth-zone.

Scann QR too follow my further Analysis

So far...

