

# Where to find the biggest shell

## Exploring the effect of Depth and Coastal Proximity on *Arctica islandica* Height



### *Arctica islandica*

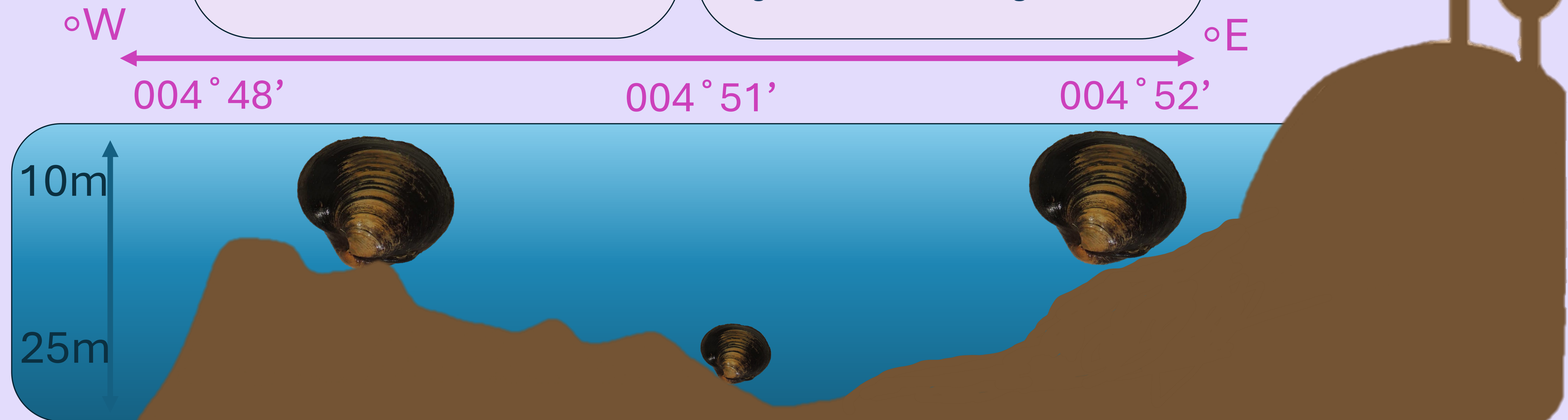
- **Bivalve** – only species in its family
- Enjoyed in **fine dining** in Norway
- Longest-living non-colonial animal (507y)
- **Height** represents annual growth analogous to tree growth rings, and is affected mainly by food supply and temperature

### Methods:

118 ocean quahogs were collected from 3 locations on a **coastal proximity** gradient, and from depths between 10-25m. They were then measured and weighed

### Analysis:

Two-way ANOVA analyzed whether depth and **coastal proximity** has a significant effect on **height**



### Key findings:

- Depth gradient effect on height ✓
- Coastal proximity effect on height ✗

### The biggest ones are **shallower**, why?

- Food supply varies with depth
- Possibly temperature

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