

Generating a year-around profitable trade of live handpicked scallops (*Pecten maximus*) with optimal quality



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Aims

1. Identify bottlenecks and optimize critical points within the value chain, from harvest to market.
2. Market analysis – Differentiation and branding



Critical points within the value chain

- Gentle handling essential to maintain good quality and survival.
 - Exposing scallops to 1 m drop caused 90 % mortality after five days of subsequent revitalization.
- Water flow should be adjusted according to season (temperature) and scallop condition

Month	Water temperature (°C)	Oxygen consumption (mg O₂/kg scallop/min)	Recomended water flow (l/min/kg scallop)
September	13.0-14.5	0.28 ± 0.01	0.30 - 0.35
April	4.5 - 5.0	0.11 ± 0.01	0.10 - 0.13

- Higher flow should be used 0-24 hours post-harvest



Effect of stacking height on scallop vitality



Control



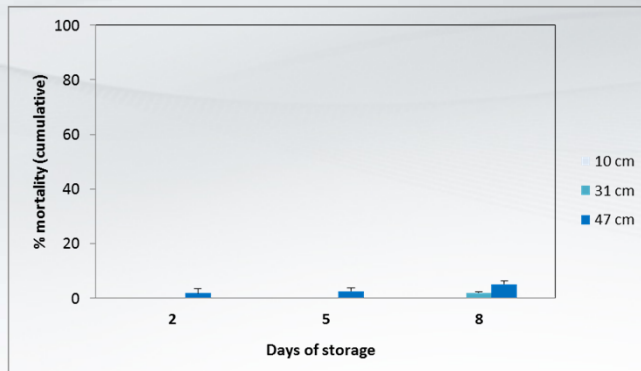
10 cm



31 cm

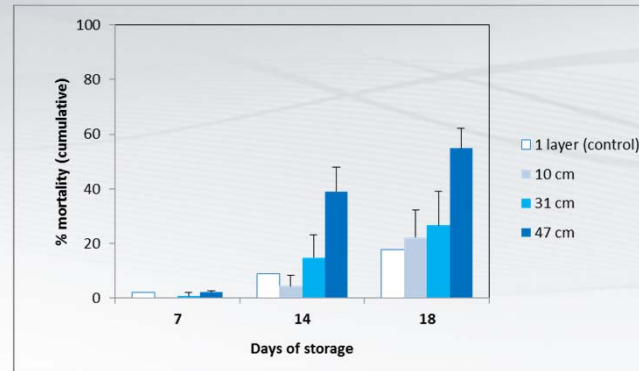


47 cm



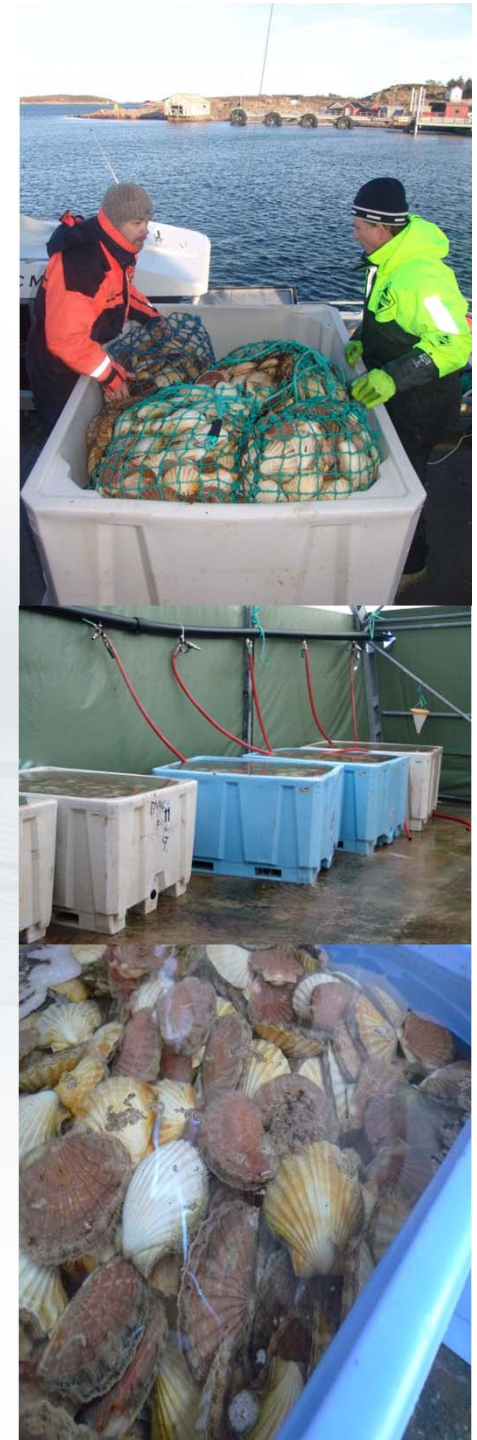
8 days storage – September

- Water temperature : 13 – 14.5 °C
- Flow: 0.4-0.5 l/min/kg scallop

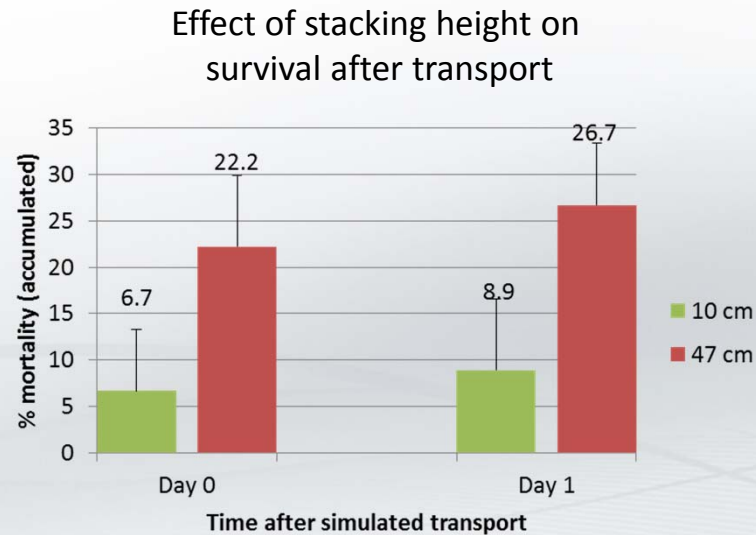


18 days storage – April

- Water temperature : 5 – 6 °C
- Flow: 0.2-0.3 l/min/kg scallop

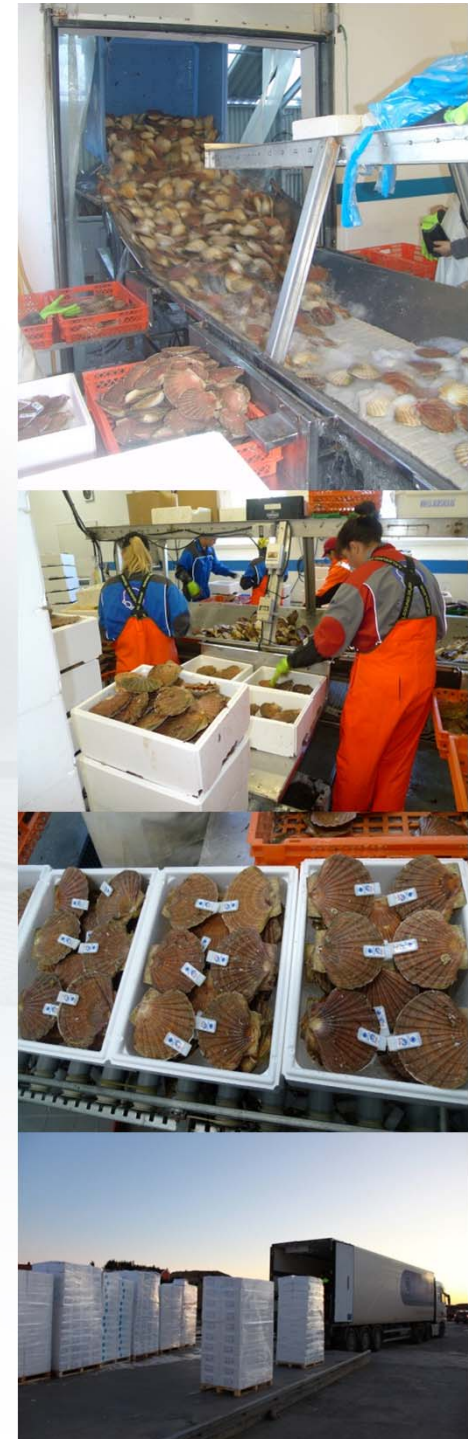


Effect of pre-treatment on scallop survival during transport



The sum of stressors through the value chain affects scallop vitality and mortality at final destination.

Ongoing work include analysis of physiological stress parameters (AEC, L-Lactate and glycogen) as response to handling, storage and live transport.





Market analysis – Differentiation and branding

Norwegian hand-picked scallops have advantages compared to scallops with other origin:

- Gentle harvest
- Clean scallops without sand
- Large sizes
- Sweet mineral taste
- Reputation for good quality in the market

Important points in the branding strategy:

- Product quality
- Origin
- Logo and clip on the product
- Direct communication to customers
- The story around the product
- Invite customers and agents to visit divers and the production facilities





Collaboration partners



Kvitsøy Edelskjell AS
Producer of King Scallops

