

# Fisheries Transport Systems

AQS325

10. Week

Carry alive crustacean

| <b>Weeks</b> | <b>Topics</b>                           |
|--------------|---|
| 1. Week      | Carry fish by iced water                |
| 2. Week      | Carrying the fishes by cooled sea water |
| 3. Week      | Carry fishes with ice                   |
| 4. Week      | Carry by cooled store                   |
| 5. Week      | Carry by freezing                       |
| 6. Week      | Carry by salt                           |
| 7. Week      | Fish transport: rules                   |
| 8. Week      | Carry alive fish                        |
| 9. Week      | Carry alive fish with oxygen            |
| 10. Week     | Carry alive crustacean                  |
| 11. Week     | Carry alive larvae                      |
| 12. Week     | Carrying equipment                      |
| 13. Week     | Carry by frigorific track               |
| 14. Week     | Carry fishes long distance              |

## **The trade of live crustaceans in Portugal: space for technological improvements**

Sara Barrento António Marques Sónia Pedro Paulo Vaz-Pires Maria Leonor Nunes

*ICES Journal of Marine Science*, Volume 65, Issue 4, 1 May 2008, Pages 551-559,  
<https://doi.org/10.1093/icesjms/fsn037>

The trade in live crustaceans, mostly imported animals, is an interlinked and complex chain, from fishing, collection, holding facilities, and transportation, to the end-consumer, the various facilities playing a key role. Along the chain, animals can be affected by several stressors, inducing high mortality with consequent economic loss, and contributing to unsustainable exploitation of the resource. A survey was developed to characterize storage, transportation, and handling issues affecting various crustaceans at Portuguese holding facilities.

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## LONG DISTANCE TRANSPORT TECHNOLOGY FOR LIVE CRUSTACEANS

### TLC Website

The current method for shipping live crustaceans is either by air-transport or by land-transport in 'Vivier' trucks. Transport by land using 'Vivier' trucks is not effective due to the necessity to carry up to 10 tons of water to accommodate 6-8 tons of product. The survival rate of the creatures over long transport times can be less than 70% due to the build up of ammonia and nitrite which causes mortalities and general weakness. Even if the creatures arrive at their destination alive further mortalities can be caused after re-tanking due to stress during shipping.

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The methods developed can be summarised as follows:

- preparation prior to shipment - minimising nitrates and nitrites, minimising stress and reducing metabolic rate.
- transportation, packaging and control methods for periods of up to 60 hours.
- re-tanking at the reception site such that mortalities do not occur within the crucial first 2 days.

## The Good Practice Guide to Handling and Storing Live Crustacea

Research and Development, Seafish Author: Marcus Jacklin, Jason Combes

Seafish has an ongoing programme to produce good manufacturing practice guidelines (GMP) for the fishing and related industries. These GMP guidelines have been produced for commercial operatives engaged in handling and storing live crustacea within the United Kingdom. They aim to help businesses achieve high standards of operation by encouraging practices that ensure product safety, product quality, and efficient use of resources. The advice has been produced in collaboration with the industry and appropriate regulators.

*The Good Practice Guide to Handling and Storing Live Crustacea*

Research and Development, Seafish Author: Marcus Jacklin, Jason Combes

*Specific Guidance for Spider Crab*

*Specific Guidance for Velvet Swimming Crab*

*Specific Guidance for Common Prawn*

*Specific Guidance for Squat Lobsters*



The *Good Practice Guide to Handling and Storing Live Crustacea*

Research and Development, Seafish Author: Marcus Jacklin, Jason Combes

Specific Guidance for Lobsters

Specific Guidance for Nephrops

Specific Guidance for Brown Crab

[http://www.seafish.org/media/publications/crustaceagpg\\_0505.pdf](http://www.seafish.org/media/publications/crustaceagpg_0505.pdf)

# References

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