



Aqua case  
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Exercise 1

The welfare in the reared fish

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## The challenge

The property of the farm wants to improve the welfare of the reared fish in the pre-ongrowing tanks.

## The questions to answer

- 1) Considering the farming system which actions will you do to improve the welfare of the reared fish in the pre-ongrowing tanks?
- 2) Which are the physiological processes that are involved in fish welfare?
- 3) Which are the connections between the physiological processes and the actions that you choose?

## Additional materials

In addition to the case the following informations on the rearing condition of sea bass in the tanks are supplied:

Stocking density:  $17.5 \text{ kg/m}^3$

Daily water volume renewal rate: 3%

Tank volume:  $12 \text{ m}^3$

Dissolved oxygen: 5.5 mg/l

## Learning goals

To identify the connections between environmental conditions and the physiology of the fish

To understand the consequences of changes in the environmental conditions on fish welfare

To understand the meaning of welfare in reared fish