



Marine biological resources

# COCORICO2

# SUSTAINABLE FRENCH SHELLFISH FARMING IN A WORLD WITH HIGH CO2 LEVELS

Climate change and ocean acidification are occurring as a result of anthropogenic CO2 emissions.

CocoriCO<sup>2</sup> is an interdisciplinary project which aims to observe, analyse, anticipate and remedy the impact of increasingly warm, acidic water on shellfish farming. The project takes into account the physiology and health of the relevant species, the quality of the environment and the repercussions on the economy.

This project will undertake several studies to investigate the natural variability in the high frequency pH (acidity) data for water across some ten production ponds. These represent the entire shellfish farming sector, including bays, rias, nurseries, fattening ponds and lagoons. The pH data will be correlated with other parameters in carbonate chemistry and the environment.

The impact of acidification and warming on the bivalve species most commonly farmed in France will then be measured over a full life cycle, in a professional farm setting.

The project also aims to provide tools for predicting the effects of acidification and warming on shellfish production and build in calculations for the adaptive capacity of shellfish. More broadly, the project's ambition is to measure and provide information on how vulnerable ecosystems, species and businesses are to climate change and acidification, and on how these factors affect the bioeconomy.

The CocoriCO2 is also recognised by the Pôle Mer Méditerranée cluster.

## **Partners**

#### COM\_PROJECTS\_CATEGORIE\_PARTNER\_ ENTREPRISES

Comité Régional Conchylicole de Bretagne Nord, Morlaix

#### **Research centers**

Ifremer, Plouzané [Project Developer] CNRS DR20, Villefranche

#### Other partners

Comité national de la conchyliculture Comité Régional Conchylicole de Méditerranée, Mèze

### Funder

Fonds Européen pour les Affaires Maritimes et la Pêche (FEAMP)

#### Labelisation

28/06/2019

#### Overall budget

1 470 K€