



Citizen Science Case Study – Observing Oysters

Through community consultation, scientific input and citizen science expertise, Restoration Forth designed and trialled a series of citizen science activities to engage local communities. These activities contribute valuable data and understanding to identify suitable oyster deployment sites and determine the impact that oysters have on surrounding biodiversity. To attract different audiences, the activities vary in length and complexity. Restoration Forth launched a citizen science guide and associated resources which are used to train local communities.

Why oyster citizen science?

On similar oyster restoration projects volunteering opportunities are focused around cleaning oysters for deployment. We wanted to create a pathway for volunteers to help collect scientific data to help shape our project.

Before developing and designing opportunities to engage the public, it was important to ensure that the data collected would have real value for both the project and the ability to contribute to wider research, policy and decision-making.

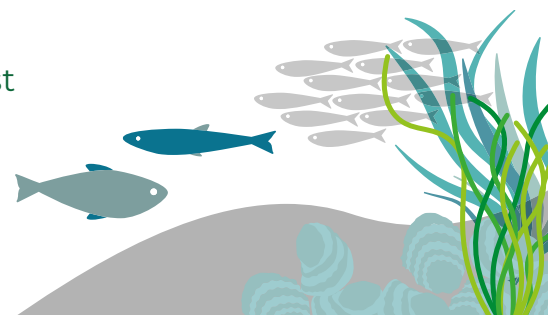
The community engagement team, led by Marine Conservation Society, worked with scientific specialists from Heriot-Watt University, to make decisions on the data needs of the project. There were three datasets of interest:

- Suitable sites for the oysters
- Survival or mortality of the oysters
- Change in biodiversity in the areas oysters are released

Community Involvement

Our long-term ambition is to support communities to develop a sense of stewardship for the oysters and develop the skills and confidence to continue monitoring and advocating for oyster restoration after the project comes to an end.

Two workshops were held close to the planned sites of restoration to collect thoughts and gauge levels of interest from local people.



After some discussion, the community decided to prioritise the activities that were most likely to influence policy and were happy to be steered by specialists to determine what data to collect. Four monitoring surveys were created for trial:

1. Habitat assessment – looking at the ground-type (mud, shell, gravel etc.).
2. ‘Oyster Observer’ survey – Counting the number of historic oyster shells around the Firth of Forth.
3. Biodiversity monitoring survey – Recording what species appear near, on or with the oysters.
4. Oyster monitoring survey – How many of the oysters have, or have not, survived.

Restoration Forth Monitoring Guide

A Restoration Forth Monitoring Guide was developed to share the citizen science opportunities with local communities. The resource details the four activities, instructions for how to do them, and a link to the Restoration Forth citizen science webpage. Here you can find further information, species identification guides, safety information, and submit your survey results.

The activities were listed in order of time commitment and the amount of training required for participants to develop skills and confidence in survey techniques.

Find the guide here: [Restoration Forth Monitoring Guide](#)

Engagement

Training sessions were held online and at locations around the Firth of Forth to train volunteers in the habitat assessment and Oyster Observer Guide surveys.

By the end of 2024:

- **300 members of the local community had been engaged with the Restoration Forth Monitoring Guide**
- **420 people conducted 130 surveys**
- **3,910 shells were recorded**

