

NATIVE OYSTER – PILOT OYSTER NURSERY PROPOSAL

NOVEMBER 2024

Proposed Pilot Oyster Nursery Project

Davaar Island Marine Conservation Initiation Pilot Oyster Nursery Project aims to support the natural recovery of the native oyster around the waters of Davaar and Campbeltown Loch. We seek to install a pilot project involving 6 oyster trestles, which we aim to be operational by Spring 2025.

The oyster nursery design (see attached drawings) aims to house a micro-habitat of 27 mature oysters in each suspended cage, with the hope that they can be monitored, protected and obviously will hopefully reproduce and release the next generation of oyster larvae to settle out on to the suitable settlement cultch and then eventually the seabed around Davaar Island and Campbeltown Loch. The Oyster Nursery system is designed to supercharge the breeding of mature oysters. By holding oysters in close proximity, they will find it much easier to reproduce in an area identified to be suitable for both spawning and growth. The site is sheltered, plenty of water flow and nutrient availability. In time, it is hoped that these adults will release millions of larvae into the surrounding waters, where they settle and grow on the suitable substrate supplied. By suspending them above the seabed, they also have more available food and are kept away from predators and potential smothering by sediment. Similar projects have been established in other parts of the UK.

The project will involve the setting of intertidal trestles. From these trestles, Oyster Nursery baskets will be suspended containing the existing adult Native oysters. Settlement clutch (locally collected mussel & oyster shells) will be used. Two methods will be used for the cultch – firstly housed in Mesh Spat Bags, suspended in adjacent Oyster Baskets and secondly, settlement tiles positioned underneath the trestles. This intertidal method will also allow easy access to the nursery area from dry land. The system is designed in a way that means it is safe to reach the nurseries to inspect them and carry out any work required. The trestles should be a cost-effective way to pilot this project with minimum disruption or obstruction. The aims of the project are simply to encourage the survival and revival of the Native Oyster population in Campbeltown Loch and Davaar Island to what it once was. This is a restoration project and is not commercial in any way.

Financial resources

The cost of installation and operation of the Native Oyster farm will be provided by Davaar Island Marine Conservation Initiative and assisted by a grant from the Campbeltown Community Wind Farm Fund.

Production and strategy plan

The aim is to trial the housing of a small number of adult Native Oysters (*Ostrea Edulis*) in Oyster Nursery Baskets adjacent to settlement tiles and/or Oyster mesh bags containing discarded Oyster & Mussel shells (cultch) suspended from trestles in the intertidal zone. The site will be regularly checked for damage and repairs by members of DIMCI including Catherine Cannon (Kildalloig Farm) and Ned Kelly (Davaar Island) who live on site. The oysters will be checked and monitored 2 times a month.

Future

The pilot restoration area consists of an area which will have a seabed / intertidal footprint of some 42,500 m2. It is likely these 6 trestles will be moved around within this area over time to test where both Adult and Juvenile Oysters thrive best, and minimise losses, predation and /or poaching risk.

Decommissioning measures

In case the lease is terminated- ended, or the pilot is unsuccessful. Davaar Island Marine Conservation Initiative will be responsible for the decommissioning of the equipment. The trestles will be removed, and the seabed restored to its original state.

Stakeholders

Due to the location of the Oyster restoration project being located in the intertidal zone, there will be no effect for boat traffic. There are no present moorings in the area other than the ones owned by POL depot.

Cultivation Equipment

Pilot Nursery installation:
 6 x 320cm x 120cm rebar oyster trestles
 Oyster Baskets
 Settlement Tiles

Day 1: Place 6 Oyster trestles by hand in the intertidal zone.

Day 2: Attach Oyster Nursery Bags to trestles

Day 3: Place Native Oysters, sourced from the immediate vicinity, in the Nursery Miniplatt baskets.

Day 4: Stock Mesh Spat Bags with Cultch, sourced from surrounding area, Davaar Island Dhorlin

Coordinates:

Proposed Native Oyster Restoration Coordinates						
Description	Grid Reference	X	Y	Latitude	Longitude	Latitude , Longitude (degs, mins, secs)
Point M	NR 74500 19951	174500	619951	55.421428	-5.5648727	55°25'17"N , 005°33'54"W
Point F	NR 74194 19255	174194	619255	55.415049	-5.5691367	55°24'54"N , 005°34'09"W
Point G	NR 74196 19216	174196	619216	55.414693	-5.56907	55°24'53"N , 005°34'09"W
Point H	NR 74542 19964	174542	619964	55.421561	-5.5642227	55°25'18"N , 005°33'51"W
Midway points						
point c	NR 77449219617	174492	619617	55.418431	-5.564736	55°25'06"N , 005°33'53"W
point b	NR7452919620	174529	619620	55.418474	-5.564148	55°25'07"N , 005°33'51"W