C6 Annex 1 - Capo Mortola transplantation protection devices

The installation phase of *Pinna nobilis* is a crucial part of the restoration strategy for this species. It involves several stages, from preparing the organisms to placing them at the final site. The optimal depth for implantation is usually 10-18 metres, offering a good compromise between light intensity and low hydrodynamics. Sites that receive *Pinna nobilis* individuals should have *Posidonia oceanica* meadows and *Cymodocea nodosa*/*Zostera spp*. beds, as well as muddy or sandy substrates. Two translocation events were carried out at Capo Mortola, and 10 *Pinna nobilis* individuals have been transplanted since the start of the project.

Transplantation action with protection devices:

Dig a hole in the sediment, either using a Sorbonne or by hand, that is at least one third of the organism's total length. The specimen should be inserted at least halfway into the sediment and positioned vertically. If the organism has grown in a jute bag, place the entire bag in the sediment, the jute will degrade within a few weeks. It is essential to protect implanted individuals from predators by covering them with appropriately sized netting or cages. The cages are fixed to the ground using metal stakes. A 10x10x5 non-galvanized electro-welded mesh was used to create the protection. Each cage is marked with a small float before the individual is tagged. Another benefit of cages is that they can help to anchor plants in place once they have been moved. The maximum recommended density for adults is one individual per square metre. Even when *P. nobilis* adults are large, it is useful to place a rock on top of the specimen after inserting one third of it into the sediment, to ensure that it remains upright.

Fig.1 Individual transplanted and protected with a cage inside a patch of Posidonia oceanica at Capo Mortola, Liguria (photo by Marco Tessaro).

Fig.2 Another individual transplanted at Capo Mortola in Liguria and protected by a cage (photo by Alice Oprandi).

Fig. 3 These scientific divers are ready to transplant and position a cage to protect an individual of Pinna nobilis (photo by Marco Tessaro).