This leaflet is intended to offer a summary of the methods used to cultivate native, Manila and American hard shell clams in the UK. More detailed information about specific aspects of the business may be found in Seafish publications, technical publications from other agencies and books. Prospective cultivators are advised to consult these in addition to this sheet. Preliminary business planning assistance can be found in the associated Seafish economic model and 'Hyperbook' publications.
CULTIVATION

Site selection

- Before beginning any commercial activity, it is prudent to conduct small-scale trials for at least 12 months on the intended site. This will give an indication of its overall suitability.

- In the UK, clams start to grow in the spring when seawater temperatures reach 6 - 9°C. Growth rate reaches a maximum in July or August when water temperature peaks (usually 14 - 18°C) and then falls off again as the temperature drops back below 6 - 8°C in November or December.

- Salinity should generally be above 25%.

- Intertidal and sub-littoral locations are best. Clams will grow more slowly higher up the shore due to the condition at around 6ºC.

- Alternatively, small seed can be purchased and held in nursery trays on trestles on the foreshore until large enough to sow.

Cultivation techniques

- Manual methods can be used for small-scale cultivation. More mechanisation is needed for laying mesh and harvesting as scale of production is increased.

- Manila clams generally have higher survival rates than native clams with around 50% of seed reaching market size.

- Clams are usually grown in plots under lengths of netting (50 x 2 m), with 5 x 5 mm mesh sizes to protect them from predators, and in the case of non-native species, to also keep them in containment. Sewing densities should be around 400 to 800 m⁻².

- Clams can also be grown in oyster bags sunk into the sand in rectangular plots (3.8 x 0.5 m) and staked into place leaving about 2.5 cm protruding above the sand. Initial stocking density should be approximately 400 to 500 seed at three shell length.

- Clams will grow in trays or bags on trestles although this is a less common method. The clams are exposed to environmental extremes and tend to have misshapen shells due to the coarse mesh used.

- When deciding upon a culture farming location the relative costs of production should be considered carefully as bag and tray culture can be up to four times more expensive than sowing seed into meshed plots.

- Despite the coarse mesh used, larger seed (10 mm+) is more expensive but has higher survival rates than native clams and American hard shell clams take 3 - 4 years. More northerly locations may take another year to market size.

- Although there are markets for clams in the UK, much of the production is exported to the continent particularly France, Spain and Italy.

Equipment

- At increased production levels mechanisation will be needed in order to lay mesh and to harvest the clams. Equipment that may be needed includes tractors and trailers, small boats, quad bikes.

- Additional equipment may include storage and dispatch facilities, a depuration facility, weighing and grading machine, packing system, stock handling and dispatch facilities, a depuration facility, weighing and grading machine, packing system, stock handling.

- A clam farmer will also need an assortment of smaller pieces of equipment and safety clothing in addition to the more specialised items. Examples of the equipment required include First Aid kit, portable pumps, life jackets, portable face masks, binoculars, personal communication devices (mobile phone or VHF radio).