Oyster Farming

Oyster farming operations can be broadly divided into three stages:

1) Spat collection 2) On-growing 3) Harvesting

Spat Collection:

There are a number of different techniques used to collect spat, but the basic principles for all methods are similar. Spat collectors must be constructed of a material that encourages the settlement of spat, whilst providing the maximum amount of surface area for settlement. They must also provide the juvenile oysters with enough protection from predators such as fish, and must allow the oysters to be easily removed without damage. Two common methods involve the use of plastic slats, or tar coasted sticks.



Once the spat have settled in sufficient numbers, and have grown to a size where predation is not a risk, the juvenile oysters can be removed from the catching frames and moved to areas that are compatible with the next stage of growth. Such areas have higher nutrient loads (more food for the oysters), and typically lower spatfall, meaning that growing oysters will not be excessively fouled by setting oyster larvae.











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On-growing oysters:

There are a variety of different techniques that a farmer may use to grow oysters. Typically these can be divided into two systems; those that use a 'rack & rail system', and those that use a 'long-line system'.

The rack and rail system involves some form of container or tray that holds the oysters, and this container is then placed on a supporting rack that is built in the river.



The long-line system on the other hand has a much smaller foot-print in the estuary, and as the name suggests, consists of a single line, on which baskets or bags containing oysters can be clipped on or hung.

Traditionally, the oyster industry in NSW was based on the rack & rail system, but as new technology and techniques have emerged, more and more farmers are trialling long-line systems on their oyster leases. This trend has also resulted in the increased use of reusable plastic products. In the past, the industry was heavily reliant on tarred wood or treated timber racking systems (as this protected the wood from boring animals such as snails), however this is no longer viewed as being environmentally sustainable as the industry looks to improve its practices.









Harvesting:

Most oyster farmers use trays to 'finish' their oyster just before harvesting. Plastic trays require very little maintenance and are being introduced to replace previously used tarred or treated timber and wire trays. Tray divisions prevent oysters from clustering as a result of wind and waves, which would otherwise result in uneven growth. Snap on lids provide added protection from wave action and bird predation.

The trays are placed on the racking system so that the oysters are intertidal; remaining underwater for the majority of the tide, but are fully exposed at low water. Exposing oysters for part of the tidal cycle is a technique used to manage fouling, and is also an important stage in toughening the oyster, strengthening the adductor muscle to prolong the shelf life after harvesting.











