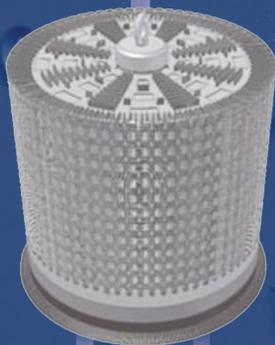


AEGIR

Sustainable Lobster Sea Ranching Using Unique Aegir Booster Technology



www.aegirhavbruk.no

WHY UNDERTAKE SEA-RANCHING ?

Ranching of lobsters, as undertaken in some Research & Development projects across Europe and North America, involves the introduction of hatchery produced juveniles to suitable habitats. These are «seeded» and left to grow in the natural environment to be harvested when they attain a suitable size. Sea ranching for stock augmentation can be undertaken when :

- The lobster stocks are depleted.
- The market demand for such a product is increasing, and is variable from one year to the other. Sea ranching is used to increase and stabilize the production and delivery.
- There is a naturally uneven distribution of lobsters within the fishery. It may also be used to boost harvestable quantities of lobsters where numbers are limited by larval or juvenile mortality. It promotes the idea of a sustainable «ecosystem-based» fisheries management.

OUR COMPANY



Aegir Havbruk is an innovative, pioneer company in Norway, specializing in wild lobster farming for environmental restocking for commercial purposes. The major Research and Development sea-ranching lease, hatchery and engineering facility is in Farsund. The company also has an office in Stavanger.

Aegir Havbruk has an underlying philosophy of continuous research and development. For almost a decade, we have continued to strengthen our industry leading experience in the manufacture of efficient, secure and low maintenance lobster settlers, Aegir's main products. This system ensures a faster and safer release of lobsters juveniles giving a maximum re-catch.

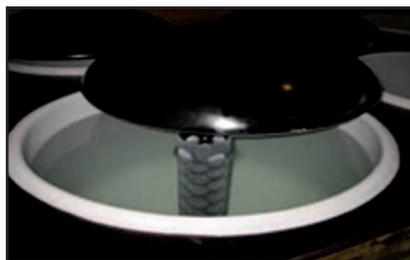
In order to accomplish and offer a complete sea-ranch solution, hatchery equipment can also be provided. Customers can benefit from our expertise through our complete range of sea-ranching services :

- Feasibility studies, turn-key solutions
- Sea ranching management & logistics
- Hatchery design & engineering
- Site localization expertise
- Technical assistance
- Training

From the hatchery...



Larvae hatch in specially designed and fully scalable recirculating hatcheries that allow improved control of water parameters and biosecurity.



Lobster incubators are equipped with injector heads to ensure optimum water flow, feeding and larvae distribution.



Lobster larvae are reared until they reach their first juvenile stage that occurs after the third molt (Stage IV).

Our hatchery and sea-ranching products have been tried and tested for almost a decade.



Lobster Incubator

The lobster juvenile incubator is specially equipped with an injector head which ensures optimum flow and distribution of juveniles and food. The unit has a filter that prevents lobsters leaving the tank. Excess food is filtered out of the tank ensuring high water quality. The incubator tank is mounted on a bench and includes a lid.

The Lobster Settling System™

Cartridge : The cartridge section consists of a number of plates. The plates are shaped for optimized water flow and supply of food and so that juveniles find protection against other juveniles and achieve a natural biological development.

Canister : The cartridge section is located within the canister, lobster juveniles are transferred into it until it is full. The canister then ensures a secure, on-growing, living environment until being transported and placed into a lobster sea ranch.

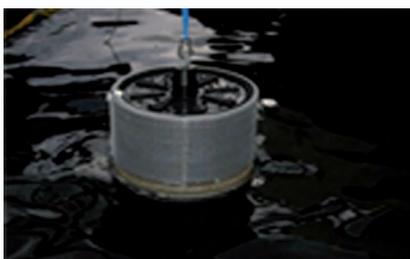
Migration unit : The cartridge is removed from the canister and mounted on the migration unit. A retrieval line is attached and the unit is submerged in the desired location. The juveniles leave the cartridge/migration section, to settle in the sea ranch, within a week.

What are the benefits of the LSS ?

- Provides a **secure living environment** until the juveniles leave the system
- Gradual migration occurs without attracting natural predators
- Enables **gradual acclimatization** and adaption from the hatchery to the sea bed
- Allows the through flow of sea water carrying natural plankton food source
- Allows for even **population distribution** of juveniles throughout a farm site
- LSS design ensures proper morphological development
- Preserves the natural predating behaviour
- **No individual man-handling** of lobster juveniles
- Eliminates critical pelagic phase
- Compact **light-weight design**
- Cost efficient



...to the sea



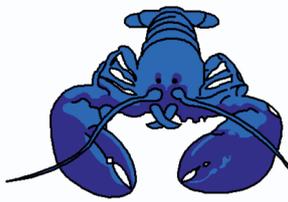
The LSS is submerged into a suitable seafloor location. Juveniles will leave the cartridge within a week which allows several uses of the LSS during an extended re-releasing period.



In order to re-catch the commercial sized lobsters, standard fishing pots, made of polyamide nets and polypropylene bars, can be used.



Harvested lobsters, after a five years period, are averaging a weight of 400 - 600 grams. They are indistinguishable from wild lobsters.



AEGIR
THE LOBSTER BOOSTER COMPANY

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