

HOMARUS au CCRH

Homarus Inc. is a non-profit organisation created by the MFU and comprised of several partners from the public and private sectors whose mandate is to increase the level of lobster resource in our coastal waters. This initiative was undertaken in 2001 by the MFU in order to find a solution to the continuing decline of lobster catches in several regions of the Southern Gulf of St.-Lawrence.

More specifically, its objectives are to:

- Increase scientific knowledge surrounding lobster biology and habitat;
- Provide an educational tool for raising awareness amongst stakeholders concerning the need for sustaining the resource, protecting the habitat and rehabilitating lobster stocks;
- Introduce practical and effective approaches to enhancing lobster habitat and lobster stocks in our coastal waters,

Current work :

Homarus is presently working on two important research and development projects, which have for their objective the enhancement of lobster stocks and habitat.

Artificial reefs project

This project aims at developing the use of artificial reefs as a measure for improving lobster habitat. Since 2001, several experimental reefs have been constructed using cement structures specially designed for lobsters. According to the most recent studies, the use of these reefs can be very effective in creating new shelter for lobsters and can also be used for extending the span of existing natural reefs. The most recent model has proven effective in creating shelter for lobsters ranging from 1 year or more.

Lobster hatchery and seeding projects

The hatchery project was created in 2002 with the purpose of providing lobster juveniles for seeding experiments. The purpose of these experiments is to determine the effectiveness of seeding as a technique to increase lobster stocks. The following overview shows that the project achieved promising results in 2004 and 2005.

A total of 53,000 stage IV lobsters were seeded on an experimental site in Caraquet, New Brunswick (NB) in 2004 following the completion of a lobster larvae population survey on this site carried out in July. Preliminary results from DFO show that the 2004 seeding in Caraquet had a positive impact on the population density of one-year-old lobsters. In general, population densities on the replicate seeding sites doubled, and in certain cases

even tripled and quadrupled. One site in particular had sixteen times more lobsters than before seeding.

Two new experimental seeding sites were created in 2005 in the Northumberland Strait: one in the Shediac/Cap-Pelé area in NB and the second one in the Fox Harbour area in Nova Scotia (NS). A total of 72,000 lobsters were seeded on the Shediac/Cap-Pelé site while 15,000 lobsters were seeded on the Fox Harbour site. A before/after population survey is in the process on these sites.

The maximum survival rate from the egg stage to Stage IV larvae achieved in the lobster rearing tanks was 10% in 2004 and 35% in 2005. The increase in this survival rate is an important indicator of the success of the project. It indicates that raising lobsters from the egg to the Stage IV juvenile stage is biologically and economically viable. The particular focus of research efforts in 2005 was to optimize the feeding regime thereby maximizing larval survival rates.

Conclusion

In 2006, while continuing to promote the use of artificial reefs to enhance or restore lobster grounds, Homarus will continue working on hatchery optimization in Shippagan, NB. Production will be increased to 500,000 larvae and for the first time, larvae will be sold to fishermen groups for the price of \$0.20 per larvae in order to help finance the project. Depending on the success of Homarus's work, it is possible to think that demand for lobster seeding will increase, thus creating a need for the construction of more hatchery facilities in the Maritime regions.