



PREDADOR

PROTECTING SHELLFISH FARMS FROM ATTACK BY GILTHEAD SEA BREAM

The highly voracious gilthead sea bream (*Sparus aurata*) can cause considerable damage to mussel and oyster farms, using its powerful teeth to crush the shellfish. The PREDADOR project, designed in collaboration with fish-farming companies, examined the issue of oyster, mussel, clam and cockle predation by gilthead sea bream, particularly during the critical production period between spring and autumn.

The PREDADOR project, which was also aimed at improving understanding of the biology and behaviour of the gilthead sea bream, developed several techniques for repelling predators and for physically protecting the beds, including high-performance barrage nets. It also provided an opportunity to create a first-ever low-energy acoustic harassment device, effective up to a range of between 200 and 300 metres.

Spin-offs and future developments

This prototype design of an acoustic harassment device was tested by the fish-farming industry and in several pilot study beds in Brest Bay (post- and rope-grown mussel farming) and in Quiberon Bay (oyster farming). The system proved its effectiveness on large shoals of bream.

To validate a prototype with long-term effectiveness and to launch it commercially, the project partners must now ensure the reliability of the acoustic system and tackle another problem which arises from the fact that the bream become accustomed to the sounds emitted by the harassment device. This phenomenon was observed during experiments with the mussel-farming industry. The partners are also planning an experimental study of the environmental impact of acoustic pressure on the marine habitat.

The project, which is interested in numerous shellfish farming businesses affected by this predation, has produced several articles in the general as well as the



Partners

Companies

CRC Bretagne Sud, Auray [\[Project Developer\]](#)
E. Frick, Locmariaquer
GOMEX, Auray
N. Le Moal, Logonna-Daoulas
SOBAIE, Locmariaquer
Société François Cadoret, Locmariaquer

Research centers

Ifremer, Brest
Ifremer, Lorient
Muséum National d'Histoire Naturelle, Concarneau

Funders

Région Bretagne
Département Morbihan

Labelisation

14/10/2011

Overall budget

565€

industry press. The acoustic solution could ultimately be integrated into their production system.