



ECOKELP

DETERMINING THE FUTURE FOR LAMINARIA FORESTS AND SEAWEED HARVESTING

The ECOKELP project, officially recognised in September 2006, sought to understand the biodiversity dynamics in kelp forests - the demography, production and interspecific relationships.

The majority of objectives identified for the project has been achieved:

- A comparative study of the structure of food webs in Chile and Europe was carried out.
- The results have highlighted the fact that ecological and physiological responses to environmental conditions vary greatly between species and also between populations within the same species.
- Studies of species resilience to perturbations have shown that large-scale eradication of populations can lead to profound changes in associated biodiversity, which may recover in a few years. But the resilience period depends on the species and is likely to be fairly lengthy (between 5 and 10 years) for populations of *Laminaria hyperborea*. In contrast, the introduced species, *Undaria pinnatifida*, is extremely effective at recolonisation. These results have underlined the difficulty of eradicating this introduced species once it is established. All the results highlighted the fact that different methods of resource management must, crucially, take the marked characteristics specific to each species into account, along with the environmental conditions in which they evolve.
- The results of this economic and social evaluation of ecosystem services relating to *Laminaria* have demonstrated how economically important the algae are for people who exploit them in Europe and Chile.

The research results ultimately obtained will provide a decision-making tool for the future and for the exploitation of kelp forests.

- 12 masters, 7 theses, 13 publications already or shortly due in print, 45 conference papers, a brochure by Ifremer and a work in preparation on managing algal resources.

Partners

COM_PROJECTS_CATEGORIE_PARTNER_ENTREPRISES

Danisco, Landerneau

Research centers

Station Biologique de Roscoff,
Roscoff [\[Project Developer\]](#)
Ifremer, Brest
Station Marine de Wimereux
UMR - Amure, Brest
Université Catholique Pontificale du Chili
Université d'Algarve

Other partners

Ligue de Protection des Oiseaux (LPO), île-Grande
Parc Naturel Marin d'Iroise

Funder

- Agence Nationale de la Recherche

Labelisation

22/09/2006

Overall budget

1 899 K€