



3.19.- Marine ecology study



Description

Marine ecology studies the relationships of marine organisms with each other and with their environment.



Objectives

To study the variables that structure the marine and coastal environment.

To find out the state of conservation of the different components and analyse scenarios of evolution.

To analyse and evaluate the meaning and significance of the interactions between the environment and anthropic action.



TARGET

Public administrations and companies, private entities, port authorities, navies, marinas, etc.



Results / Advantages

- Detailed knowledge of the marine environment.
- Prevention of environmental risks.
- Protection of the marine and coastal ecosystem.
- Compliance with applicable regulations.



Actions

1. Marine benthos studies.

Identification, characterisation and mapping of benthic communities and their biotic and abiotic components:

Taxonomic analysis of the marine benthos , Assessment of the environmental status by applying environmental quality indices (M-AMBI, MEDOCC, BOPA, POMI, VCS, CARLIT, EEI, etc.), Assessment of exploitable resources.

2. Specific studies on seagrass meadows (*Posidonia oceanica*, *Cymodocea nodosa*, *Zostera spp.*, etc.).

Cartography and characterisation of their distribution Assessment of their conservation status and analysis of evolution scenarios.

3. Marine plankton studies

Study and characterisation of planktonic communities (phyto- and zooplankton), Taxonomic analysis of marine plankton, Identification of toxic or harmful phytoplankton species, Evaluation of phytoplankton quality indices (RD817/2015), Planktonic blooms, Spanish Phytoplankton Tools (SPT and SPTT-2), Multimetric wetlands of the Balearic Islands (FITOHMIB), Integrated phytoplankton index (ITWf).

4. Environmental assessment studies

Analysis of interactions between environmental elements and pressure factors.

Assessment of interactions and modelling of evolution scenarios.

5. Other environmental studies

Census of marine mammals by visual sampling and acoustic sampling.
Study of underwater noise.