

Commitment to responsible marine research

Background

As marine research scientists we especially appreciate the uniqueness and complexity of the marine environment, and are particularly interested in preserving it for its scientific, aesthetic, ecological, and potential economic value. In fact, because of the specialized nature of the equipment required to work in the deep-sea such as research vessels and manned or unmanned research submersibles, scientists are the only group who has the opportunity to visit and evaluate these extraordinary environments. The impact of scientific activities on the marine environment pales is assessed as low in comparison with disturbance by natural processes (volcanic/tectonic events, slumps, climate variation etc.) or other human activities (e.g. mining, fisheries, commercial shipping). Nonetheless, we recognize that some scientific activities could have unwanted negative side-effects on individual regions or animals.

The sustainable use and protection of the oceans is best served by a fundamental understanding of complex marine systems. Marine research is therefore a prerequisite for and fundamental component of effective management of marine resources and the conservation of biodiversity in the seas. It must be the goal of research scientists to choose the most environment-friendly approach to their studies. To fund research proposals and expeditions the following principles need to be observed:

Principles of responsible marine science

As members of the international community of research scientists and in the spirit of responsible science we ask all participating scientists to adhere to the following principles when carrying out their work:

- 1) Avoid, in the course of scientific research, activities which could have long-lasting impacts on regional populations or high percentages of individuals.
- 2) Avoid, in the course of scientific research, activities which could lead to substantial physical, chemical, biological or geological changes or damages to marine ecosystems.
- 3) When working in areas of particular ecological sensitivity (for the North Atlantic and Baltic, for example, the areas listed in the OSPAR and HELCOM „List of threatened and/or declining species or habitats“; correspondingly for other region) or in national or international Marine Protected Areas, care should be taken to disturb the subject of protection (particularly protected species and biotopes) with regard to the protection goals as little as possible.
- 4) Avoid collection of samples not essential to the conduct of scientific research project.
- 5) Use the most appropriate and environmentally-friendly study methods which are reasonably available to you.
- 6) Ensure that transport of biota between different marine regions, which could lead to changes in the environment or the composition of marine communities, does not occur.
- 7) Avoid activities which disturb the experiments and observations of other scientists. This requires that scientists make themselves familiar with the status of current and planned research in an area and that they ensure that their own research activities and plans are known to the rest of the international research community via public domain data bases

8) Ensure the fullest possible use of all biological, chemical and geological samples through collaborations and cooperation within the global community of scientists. Samples susceptible to archiving should be placed in accessible repositories for future use.

9) Make a commitment to the international sharing of data, samples and results in order to minimize the amount of necessary sampling and maximize the global understanding of the marine environment.