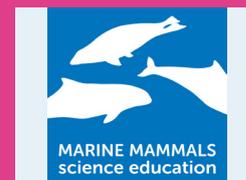


PROJECT DETAILS

Project title:	Using marine mammals for making science education and science careers attractive for young people
Project acronym:	Marine Mammals
Project URL:	www.marine-mammals.com
Project coordinator:	Dr. Katrin Knickmeier, Dennis Brennecke (University of Kiel / Kiel Science Factory, Germany)
Project contact:	kknickmeier@uv.uni-kiel.de , dbrennecke@email.uni-kiel.de
Project duration:	01/09/2016 - 31/08/2019
EU contribution:	1 797 420 EUR
No. of partners:	9
Type of activity:	Coordination and Support Action
Programme:	Science with and for Society, Horizon 2020
Area:	Science Education



Porpoises in Fjord&Bælt
Photo: Peter Verhoog / Fjord&Bælt

The MARINE MAMMALS project: Experiencing marine life to spark the fascination of science towards the young

The future of research and innovation rests on today's younger generation. But what to do when all studies show that more and more young people are losing interest in science? That's where the Marine Mammals project comes in!

The decrease in the number of young people pursuing a scientific career is a problem that Europe has been facing for a number of years. It has become increasingly difficult to attract enough young people to the sciences. However, Europe needs young boys and girls to pursue careers in science, technology, engineering and mathematics (STEM) in order to avoid a Europe-wide shortage of highly qualified scientists. The **MARINE MAMMALS** project's main objective is to tackle this challenge by increasing young people's participation and interest in STEM through inspirational real science experiences connected to marine life. Through these activities, the project also contributes to improving the career prospects of today's youth and – by increasing the scientific literacy of society as a whole – helps citizens to participate in a more and more scientific and technological world.

Coordinated by Katrin Knickmeier and supported by the project manager Dennis Brennecke from Kiel Science Factory (Germany) and the team of the EU office of Kiel University, the **MARINE MAMMALS** project is implemented by a consortium of research and education actors, including universities, a nature protection association, a small and medium enterprise, and non-school learning locations, such as a nature information centre and public aquarium. They each bring their own expertise in marine mammals, teacher training and scientific outreach to society to the project. According to Knickmeier and Brennecke, it is much more promising to combine expertise and work together constructively to fight against the decline of young people's participation in STEM. It is their first EU project and they have been successful with their proposal right away.

Using marine mammals to get more young people interested and skilled in science

The nine project partners, who are based in five European countries, chose the marine mammal research theme for a project to increase young people's interest in science for specific

reasons: not only is it an area of growing interest to young people, but it also combines many scientific disciplines, such as physics, biology, engineering or veterinary studies.

As a first step to raising the interest of teachers and students in the exciting world of science and to awaken a fascination for the different research areas involved, the project's scientific experts are developing innovative and comprehensive teaching materials based on state-of-the-art research on marine mammals. These materials will include print and digital materials, such as an interactive poster, 3D animations and podcasts (all materials will be finalised by the end of the project). Additionally, prepackaged expedition boxes will be made available for borrowing by teachers and everyone to conduct practical experiments in schools or outside the classroom.

Teachers are the key actors for MARINE MAMMALS

Trainings for teachers are offered throughout the project's runtime to give them the opportunity to try out the teaching tools and methods that are intended for use in their classes. Collaborating with teachers is of

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Read further Success Stories [here](#).

Find more projects on the different SwafS areas such as RRI, gender equality or science education on [Cordis](#).

great importance for the project since they play a key role in the learning process, they are the ones who are connected with the students, who can spread good practices and also act as multipliers for other teachers. The project has already trained hundreds of teachers from different school systems in the five European participating countries during the **MARINE MAMMALS'** national teacher trainings. More teachers were trained in the international teacher trainings - so far held in Denmark and Poland - to which teachers from all over Europe were welcome (project partner countries and, additionally, Romania, Greece, Portugal, the Netherlands and Moldavia).

of scientific experts at the summer schools is at the heart of the project; they are its cornerstone because they provide a special way to access the topic. Students often do not really have a clear idea of the daily work done by scientists and have no knowledge of the manifold career opportunities available to them in science, technology, engineering and mathematics. By engaging students in motivating hands-on experiments with scientists from marine science, they discover scientific professions and how science is done. Experimenting has a positive impact on how they approach scientific issues and on their choice of career path.

Swedish, Danish and Polish) and additionally in English. Everything is available online on the project's website as well as on Scientix's website (www.scientix.eu). Scientix is a platform created at the initiative of the European Commission - and supported by the SwafS programme - which brings together all European-funded science education projects in order to promote and support a Europe-wide collaboration among STEM teachers, education researchers, policy makers and other STEM education professionals.

Aware of the great need for science education, the European Commission has been continuously supporting projects in this field since at least the Science and Society programme of FP6. In addition, expert groups have worked on recommendations, such as the report "[Science Education for a Responsible Citizenship](#)" from 2015 which is intended for policy makers and explains why science education matters so much. **MARINE MAMMALS** is one of the science education projects funded by European research and innovation programmes that contribute essentially to the objective of making the world of science more exciting and attractive to the younger generation. In this context, the project's focus on marine mammals represents a unique approach.



Participant examining the beak of a squid, the main food source of a sperm whale. Photo: Heike Stumpfenhorst, IPN

Students meet scientific experts during summer schools

In addition to teacher trainings, the consortium also conducts summer schools for secondary students. "During summer schools, participants can experience research directly" Knickmeier and Brennecke explain, "and they can get in touch with scientific experts." The presence

To reach a broader audience beyond the trainings and summer schools, consortium members such as the aquarium and science centre work on outreach activities for a diverse audience.

To ensure user-friendliness, all tools developed by the project are available in the five languages of the participating countries (German, French,

Want to test the tools produced by the **MARINE MAMMALS** project and learn more about marine life? Visit the [project website](#), check out their [YouTube channel](#), [Facebook page](#) and [Instagram account](#), and give them a LIKE!