

Working together for a **green**, **competitive** and **inclusive** Europe

"The Baltic Sea without barriers" is a project aimed at development and implementation of innovative teaching methods and an educational programme about the Baltic Sea conservation for children and youth, including pupils with disabilities. During the first stage of the project, a cluster of 17 experts will develop an educational programme as well as educational tools and materials suitable for the respective target groups. The experts will be representatives of primary and secondary schools, teachers who work with pupils with different degrees of disability, animators and scientists. The next step will be to organise pilot workshops and training courses for pupils and teachers based on the programme, tools and materials developed by the team of experts.

The pilot stage will help verify the assumptions of the programme as well as its attractiveness and comprehensibility. Moreover, the programme will be carried out during workshops dedicated to students with disabilities. In the final stage of the project, a detailed teaching programme will be developed taking into account the lessons learned through trial training and workshop sessions.



Fot. Adam Adamski

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The main institution implementing the project will be the **Foundation for the Development of the University of Gdansk** with the substantive assistance of the crew of the **Prof. Krzysztof Skóra Hel Marine Station of the Institute of Oceanography of the University of Gdansk**. The project will engage formal and informal education experts from different institutions in Poland and Donor State - Norway. The Polish partner will be the **Teacher Training Centre in Słupsk** (Polish: **Ośrodek Doskonalenia Nauczycieli w Słupsku**), which provides professional development to teachers, promotes the development of schools and educational institutions as well as implements the Pomeranian Marine Education Programme that focuses on marine issues in the education process.

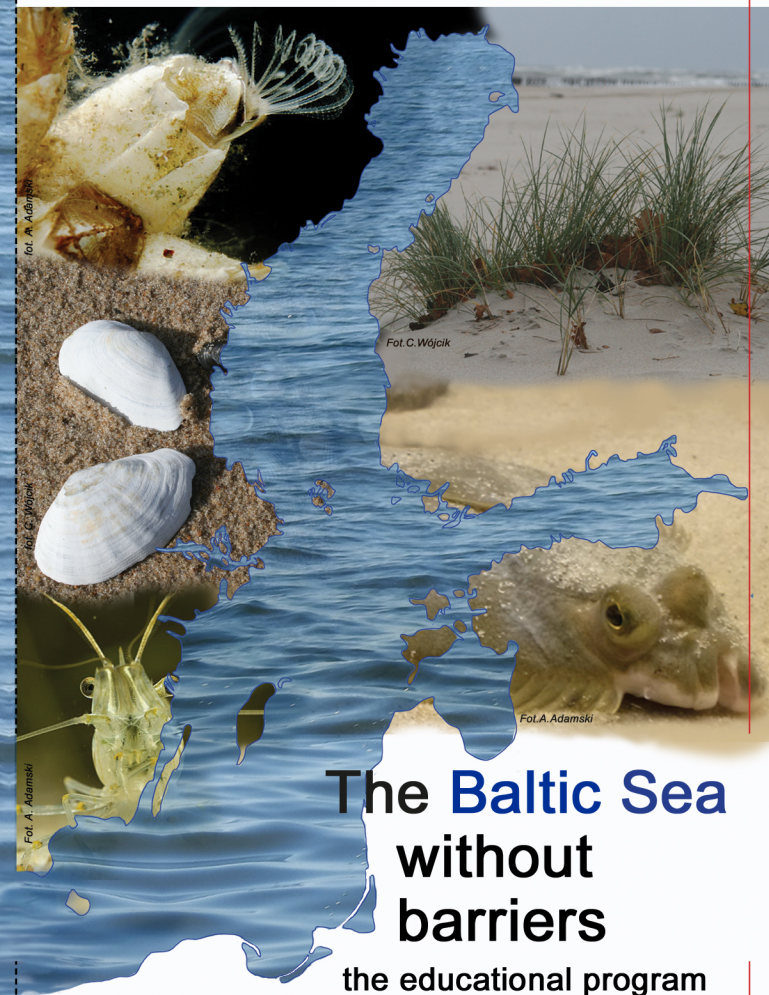
One of the Norwegian partners is the **Urban Floating Farmers Association** (Norwegian: **Grønlands flytende bybondelag**) – a group of volunteers with experience in teaching, social anthropology, marine biology, design and architecture who are enthusiasts of education in the field of urban agriculture and marine environment with an innovative approach to teaching. The other Norwegian partner is the **Oslo Metropolitan University** (Norwegian: **OsloMet – Storbyuniversitetet**), whose Faculty of Education and International Studies offers lifelong learning to preschool, primary school and secondary school teachers. Also, the University's Department of Vocational Teacher Education prepares teachers to teach vocational subjects in secondary schools.

One of the project's assumptions is exchange of experiences between partners. One of the six expert meetings will be held in Norway and Norwegian partners will take an active part in meetings and workshops in Poland. The engagement of and collaboration with the Norwegian partners will offer an opportunity to learn about teaching methods in the Donor State.

The project "The Baltic Sea without barriers – increasing educational chances for children and youth through student engagement methods" has received an EEA grant of 215,807 EUR financed by Iceland, Liechtenstein and Norway.

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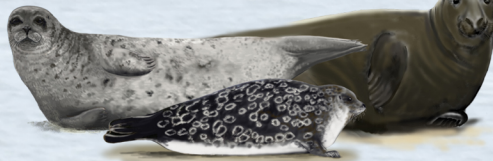
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Common Seal

Grey Seal



Ringed Seal

The Baltic Sea is in many ways a unique sea. It is brackish, mainly because of its location. It is an inland sea of 415,000km² surface area, squeezed deep into the European continent. Total water exchange in the Baltic Sea takes ca. 25-30 years, meaning that the pollutants that get there stay in the ecosystem for a long time.



Baltic Cod

Surrounded almost entirely by land, the Baltic Sea has a catchment area four times larger than its surface area. 85 million people live in 9 countries of the basin area, 15 million of them in the coastal zone. The densely populated area increases the sea's vulnerability due to exposure to various forms of human activity. 47% of the entire population of the Baltic Sea catchment area are Poles, making us particularly responsible for the condition of its environment.

Semi-enclosed character of Baltic Sea basin, sporadic inflows of salty water from the west and large inflow of freshwater result in brackish character of its waters. Due to that it is inhabited both by freshwater organisms that can reside in less saline bays or coastal waters as well as by typical marine species.

Estuarine Sand-shrimp



Blue Mussel and Bay Barnacle



Baltic Prawn



Lion's Mane Jellyfish



Harbour Porpoise

However, the largest group of inhabitants of the Baltic Sea are organisms that can easily adapt to changing levels of salinity, i.e. euryhaline organisms. Average salinity in the Baltic Sea is 7 (from 20 on the border of Danish straits to 2 in the northernmost regions), which is 5 times less than the average salinity of seas and oceans.



Atlantic Salmon



Northern Pike

As a consequence of that fact, there are fewer marine species in the Baltic Sea than in the adjacent Danish straits and the North Sea. Those that live in the brackish waters of the Baltic Sea are much smaller than their relatives in waters with higher levels of salinity (dwarfing process).



Lumpfish

*Saduria entomon*

Plaice

The Baltic Sea is particularly vulnerable to the threats caused by human activity because of its limited water volume. It is a shallow sea with average depth of only 52m and maximum depth of 459m, which is just above 10% of the average depth of seas and oceans globally.

The Baltic Sea without barriers



Shelduck



Great Black-backed Gull

Ringed Plover



The limited water volume in the Baltic Sea means high pollutant concentration levels, because there is no way the pollutants can be dissolved. Also, it is a cold sea and low water temperature slows down the pollutant degradation process, causing the formation of organic particle suspension and reducing the transparency of water.



Twaist Shad



Sprat



Baltic Herring

Human pressure on the Baltic Sea ecosystem and its coast is growing. Unfortunately, it is not balanced by growing awareness of the problem and attempts to solve it. Almost entire Poland is located in the catchment area of the Baltic Sea and most rivers flow through its territory into the Baltic Sea. This means that each of us has a real impact on the condition of the Baltic environment.



Brown Shrimp



Common Ragworm



Rockpool Shrimp

By taking care of the rivers near us, we take care of the Baltic Sea. Unfortunately, that knowledge is still not very common, since school teaches children primarily about natural terrestrial environment. Thus school education is supported by projects that ensure effective distribution of knowledge about the marine ecosystem, strengthen a sense of responsibility and motivate the society to act.