West Baltic Barrow Culture developed in the area of Warmia and Masuria in the second half of the 1<sup>st</sup> millennium BCE. Among many characteristic features, probably the most extraordinary is the way in which the past inhabitants of lakelands used to build their houses. They were constructing sophisticated artificial islands, composed of the wooden 'grid' (thus the name, lake grid dwellings), soil and stones, then reinforcing it with vertical pales, covering with a platform and joining with the land via bridge. On the platform there was space for several houses, probably just enough for few related families. Researches suppose that numerous very particularly located settlements of this culture (apart from grid dwellings we also note the ones built on peninsulas and natural islands as well as hills) are the reason to believe that their inhabitants lived in fear – of the neighbours, raiders or other enemies. But is it the only possible interpretation? The dwellings built above the water or wetlands were constructed in different epochs, and in various parts of the world – such as the most famous Alpine pile dwellings, houses (or rather whole estates) built on the pales driven into the lakebed or marches, and the artificial islands from the British Islands, called the crannogs. Some of them were probably sanctuaries, some: the manifestations of affluence and flight of fancy of the local wealthy. Meanwhile, on the submerged sites form Warmia and Masuria some artefacts connected with metallurgy were discovered. Such profession was a rare and special one in those times. Moreover, according to earlier research, some of the dwellings were burnt. The aforementioned premises might be the grounds for speculation that the artificial islands might have been connected with the metallurgic production of the time, but to confirm that, the update in fieldwork and archive studies is essential.

Project was prepared to take a closer look at the lake grid dwellings function on the basis of the particular site – Rybno, Piłakno Lake, Mrągowskie Lakeland. Its remains have already been examined to some extent. The archaeological materials, recovered by the previous expeditions, will be submitted to meticulous typological analyzes, and what is still submerged – proper exploration and documentation. Underwater archaeologists will introduce multiple innovative techniques and analyzes, unavailable to their predecessors, to get to know who and why chose this place for home and what impact did they have on the local environment.

Apart from underwater research, the aim of which is obtaining maximum data on the submerged relics of the dwelling, the model of surroundings will be elaborated, based on the aerial photography and the scans of the area. Side sonar will be used to prepare the plan of the bay with the residues of the settlement, which will also include the locations of the underwater features. The lakebed will be sampled for both pollen and chemical analyzes, results of which will be used for reconstruction of the environment, in which the dwellers of Rybno have lived. The samples of wood, on the other hand, will help to get to know when the settlement was exactly built. The project is to be completed with the archive studies. Wide ranging concept of the project, completing and verifying the results of the previous expeditions, will contribute to the knowledge about the way of life of the 'lake dwellers'.