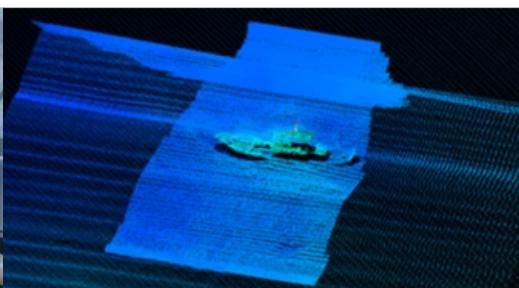
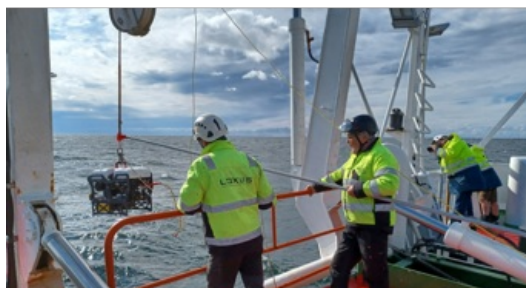


Investigation of a Possible High-risk Shipwreck in Finnish Waters



The marine research vessel *Aranda* recently surveyed the southeast side of the Finnish island of Utö. A preliminary investigation of the tugboat *Simson*, which sank in 1978, is underway for a possible oil removal operation.

The [Finnish Environment Institute](#) was responsible for the investigation of this possibly high-risk shipwreck southeast of Utö, close to the Archipelago National

Park. The *Simson* was built in 1915 and still in use in the 1970s. The vessel was overhauled in 1971 and sank in 1978, and the wreck is estimated to contain 25,000 litres of light fuel oil.

3D Modelling of the Simson Wreck

The aim of the investigation is to 3D model the wreck for further operations and to find out how it could be drained of oil. The tugboat *Simson* lies partially sunk in the mud at a depth of about 60 metres, and working at this depth poses some challenges. The modelling will be carried out using the hydroacoustic equipment of the marine research vessel *Aranda*

and imaging obtained using an ROV diving robot.

The wreck is located close to a nature reserve. If it were to start leaking oil, in average winds the oil would drift towards the Finnish coast and the Archipelago National Park. If a spillage operation is decided upon, it will be put out to tender and carried out during 2023.



The wreck of the tugboat *Simson* lies partially sunk in the mud at a depth of about 60 metres. (Courtesy: Finnish Environment Institute)

Twenty High-risk Shipwrecks in Finnish Territorial Waters

The investigation of the tugboat *Simson* is part of a programme launched by the Ministry of the Environment of Finland to improve water protection in 2019–2023. Four wrecks have so far been renovated as part of the project to investigate the possibilities for wreck renovation: the dredger *Veli* off Hanko, the dry cargo vessels *Hanna-Marjut* and *Fortuna* on the Kihti Gulf, and the motor vessel *Beatris* in the sea area of Iniö. The responsible organization for the project is SYKE, with the participation of the Finnish Navy and the Finnish Border Guard.

The Finnish Border Guard considers these pre-emptive measures to be important for the protection of the marine environment. The Finnish Border Guard is the leading national authority in operations related to the prevention of maritime environmental damage in the open sea.

It is estimated that there are about 2,000 wrecks in Finnish territorial waters, many of which may still contain significant quantities of oil or other environmentally hazardous substances. About a dozen high-risk wrecks are either rusting away or are located near important or sensitive natural sites.

The Water Protection Programme 2019–2023 is a major contribution to water protection, with the aim of achieving good status in the Baltic Sea and inland waters. The programme will reduce nutrient pollution from agriculture and forestry, clean up oil wrecks, restore water bodies and reduce harmful substances in urban wastewater.



Lowering research instruments to the sea. (Courtesy: Finnish Environment Institute)

