

Over the last few decades, ocean acoustics has become an important research area for understanding human impact on underwater sea conditions. Recent studies show that anthropogenic sounds caused by ships, drilling and other human activity may affect marine life on a greater scale than earlier expected. This new form of environmental impact, also called noise pollution, is therefore receiving increased attention worldwide. However, studies often focus on sound analyzes of large transport ships, rather than smaller boats and their possible biological impact in minor watercourses. For this reason, the present study highlights the underwater noise caused by two leisure boats with the aim of understanding their effect on common fish species in lake Runn, Falun, Sweden. By placing a hydrophone three meters under the water surface, sound levels were measured as two different motorboats passed at varying speeds and distances. The recordings were compared to pre-recorded sound samples of four fish species common in lake Runn. This sound analysis indicated that the noise emitted by leisure boats coincided with the frequencies in calls of several fish species. Although the exact biological impact of this correlation is unclear, previous studies have indicated that fish are affected by sounds in their audible spectrum. This leads to the conclusion that fish common in lake Runn can indeed hear the leisure boats used in this study and therefore can be affected by them.