OLTRESUONI: LISTENING TO SCIENCE THROUGH SOUND – A CASE STUDY IN BIOACOUSTIC COMMUNICATION

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Bioacoustics is an emerging interdisciplinary field that studies sound as both a biological phenomenon and an ecological signal. Despite its scientific importance, public understanding and engagement remain limited, partly due to the technical complexity and relative novelty of its methodologies. This project explores how an acoustic medium—the podcast—can function simultaneously as a tool for scientific dissemination and to collect novel data to refine communicating strategies for a sound-based science to broader audiences.

Figure 1. Oltresuoni Podcast Cover

The initiative, Oltresuoni, developed within the collaborative museum project Soundiversity, consists of seven narrative podcasts featuring Italian and international scientists, academics, and independent researchers. Through conversational storytelling guided by two entomologists specialized in bioacoustics and science communication, the episodes reveal the human dimension of bioacoustics scientific practice while exploring topics such as orthopteran sound production, mammal echolocation, acoustic ecology, and new frontiers like paleoacoustics and AI-based field monitoring. Produced primarily in Italian, with dubbed international contributions, the series seeks to capture both the intellectual and sensory experience of listening to science, staying close to the acoustic nature of the discipline.

Preliminary audience analytics indicate strong engagement trends. Most listeners discover the podcast via direct search rather than algorithmic recommendation, showing a proactive curiosity about natural soundscapes and scientific storytelling. The audience is gender-balanced and predominantly adult (35–59 years), with above-average listening durations and high follower retention.

Compared with global studies on science podcasts, this pattern aligns with the profiles of motivated, educated listeners who intentionally seek scientific content. Yet, the global predominance of younger audiences in generalist podcasts highlights a communicative gap that need a further discussion.

The preliminary analytics contribute novel insights to align communication strategies with the sensory essence of the discipline. By leveraging sound-based storytelling and participatory models, bioacoustics can strengthen its connection with society, promote intergenerational interest to educate a future generation of researchers and contribute to a more inclusive culture of listening to biodiversity.

Key Words: Podcast, science communication, dissemination, conservation