

Anthropogenic Impact on Foraging Ecology of Indo-Pacific Humpback Dolphins: A Multifaceted Microplastics and Acoustic Approach



Dr. Yuen-Wa Ho

- ¹. Researcher, Cetacea Research Institute
- ². Postdoctoral Fellow, The Hong Kong Polytechnic University

Time: 2023. 07. 05 Wed. 10:00

Venue: Auditorium, 1st Floor,

Interdisciplinary Research Building

跨領域科技研究大樓1樓演講廳

Host: Dr. Tzu-Hao Lin 林子皓助研究員



Abstract

Indo-Pacific humpback dolphins in the Pearl River Delta face significant anthropogenic challenges, necessitating a comprehensive understanding of their ecology for effective conservation strategies. This research focuses microplastics ingestion and underwater soundscapes characteristics. Our findings show high levels of microplastics ingestion by the dolphins, emphasizing the need for thorough microplastics research and pollution control efforts. Through our acoustic analysis, a distinct 2 kHz spectral feature was identified, serving as a reliable predictor of the dolphins' core habitats. Concurrently, analysis of long-term passive acoustic recordings denotes pattern in the estuarine system, highlighting the influence of seasonal variations in biological activities. This result points to the need for improved spatial resolution in future soundscape studies. Overall, the study underlines the need for focused conservation measures, taking into account the varied biodiversity and the social-ecological condition of the Pearl River Estuary, to secure the long-term survival of humpback dolphins amidst increasing anthropogenic pressures.