ECOLOGY & BIODIVERSITY

SEMINAR SERIES

Date: Fri., Nov. 22nd
Time: 16:00 (UTC+8)
Venue: 3N01 + Zoom

The two cetacean species resident in Hong Kong, the Indo-Pacific Humpback Dolphin (also known as Chinese White Dolphin, Sousa chinensis) and the Finless Porpoise (Neophocaena phocaenoides), play an important role in coastal ecosystems, yet their abundance is declining due to anthropogenic pressures. Environmental DNA (eDNA) analysis, although a promising method for efficient monitoring of threatened species, has so far limited application to cetaceans.

In this talk, I will introduce our recent projects that utilize eDNA to monitor these cetaceans. We developed qPCR primers specific to S. chinensis and cetacean-specific eDNA metabarcoding primers. Additionally, we initiated a project aimed at estimating dolphin age from DNA. These methods are potentially useful for collecting ecological information for cetacean conservation in Hong Kong waters.

Dr Ushio Masayuki

Ushio Masayuki is an Assistant Professor in the Department of Ocean Science at HKUST. He started his academic career as a forest ecologist and has been actively involved in research in ecology, covering a wide range of topics such as tropical forest ecology, nutrient cycling, community assembly, environmental DNA analysis, and statistical ecology. He moved from Kyoto University to Hong Kong in 2022 and began ecological research in local coastal regions. In Hong Kong, his research team is developing environmental DNA-based methods to monitor cetacean and fish communities in coastal ecosystems.

ALL ARE WELCOME!

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