The University of Hong Kong
School of Biological Sciences

Public Seminar

The ecology and conservation of Eurasian otter (*Lutra lutra*) in Hong Kong

Sharne McMillan

For the degree of Doctor of Philosophy

Date: 29 April 2021 (Thursday)

Time: 4:00 – 4:45pm

Venue: Zoom (link upon request)

About the speaker:

Sharne is a PhD candidate supervised by Dr. Tim Bonebrake and Dr. Billy Hau. She is interested in threatened species ecology and using research to inform practical conservation.

Abstract:

The conservation and management of threatened species in areas where humans have a strong influence on the landscape is a complex challenge, and the identification of effective conservation priorities is often hampered by a lack of knowledge of the species ecology and threats. This is particularly pertinent for the Eurasian otter (*Lutra lutra*) in Hong Kong which is a rare, elusive species that has narrowly escaped extirpation, and now survives in a densely (human) populated environment. Ever-increasing anthropogenic threats in Hong Kong further highlight the need for a species action plan; however, it is a notoriously difficult species to study, and we have limited knowledge of this species in Asia.

Given the conservation challenges associated with this species, I used a multi-pronged and integrated approach to collect ecological data required to inform a species action plan. Initially, local ecological knowledge was used to inform otter status and distribution, as well as determine local community perceptions surrounding management and conservation of the species. This study provided valuable information regarding historical and present otter records and attitudes toward otters. Building upon this baseline, non-invasive sign surveys and genetic analysis were used to estimate the population size and confirm the otter distribution using field survey. Furthermore, as there is a strong relationship between the availability of food resources and the distribution and survival of the species, I also investigated the otter diet using morphological analysis. Based on the key research findings, actions for the management and conservation of otter in Hong Kong are recommended.