

Seeing the Unseen - Wetland Plankton Education Programme Completion Report



濕地浮游生物教育計劃
Wetland Plankton Education Programme

Sea Education Association



May 2023 – December 2024

Executive Summary

“**Seeing the Unseen – Wetland Plankton Education Programme (見微知著- 濕地浮游生物教育計劃)**” is a 20-month education programme organised by Sea Education Association Limited, funded by Castle Peak Power Company Limited, The Hongkong Electric Company, Limited and Hong Kong LNG Terminal Limited (HKLTL) under Marine Conservation Enhancement Fund (Education and Ecotourism).

This Funded Project aims to raise the public awareness and appreciation of the local wetland plankton community through Education and Public Engagement Programmes for students ranging from university, secondary and primary cohorts and the general public. In addition to environmental education, this project also invites local artists to provide art displays to bring the tiny but essential plankton to the daily lives of Hong Kong.

This 20-month Funded Project is divided into two rounds where the first round runs from **June 2023 to February 2024** and from **January 2024 to December 2024** for the second round. Each round includes a series of education programmes, University Ambassador Training Programme, Public Plankton-blitz Day, Primary School Programme and Secondary School Student Programme. In the second round, Colouring Contest, Public Exhibition and Result Announcement and Prize Giving Ceremony are held to engage younger participants and the general public.

The **University Ambassador Training Programme** aims to equip students from tertiary institutes with front-line practical experience in science communication and environmental education. This programme is made up of one indoor training session, one outdoor training session. Each ambassador is required to attend and assist in at least one primary school /public blitz day and two secondary school programmes. 27 ambassadors were trained and they assisted the execution of the education programmes.

The **Primary School Programme** aims to invite primary students to have a taste of the microscopic world and the importance of the tiny plankton community. The Programme consists of 2 themed lessons (L1 - Introduction of plankton and take a glimpse of them and L2 - Create your own Plankton). Participating schools can select either L1 or both L1 and L2. The Primary School Programme received 15 applications and 10 were completed with **341 participants**.

The **Secondary School Student Programme** is a Plankton-Blitz comprising an outdoor survey and indoor investigation. The outdoor surveys include measuring physical parameters, plankton sampling (vertical tow and oblique tow) and indoor microscopy session afterward. Students are provided with a worksheet and a simple identification guide to enhance their understanding of the morphology of common marine plankton species. 20 sessions were held with **370 participants** from 20 secondary schools.

The **Public Plankton-blitz Day** featured a brief indoor introduction on plankton followed by an outdoor sampling experience at the field site, which included measuring physical parameters, plankton sampling (vertical tow and oblique tow) and field microscopy session. 4 sessions were conducted with **82 public citizens** engaged.

The **Colouring Contest** aims at promoting the knowledge of plankton to the junior group of citizens through the beauty of plankton. The line-art template of the contest is designed by local artists. The contest is open to 3 age groups 1) Kindergarten (K1-K3) 2) Junior Primary Group (P1-P3) 3) Senior Primary Group (P4-P6). A champion, a first runner-up, a second runner-up and 10 merit awards will be selected for each group (Total 33 awardees).

All awarded artworks were exhibited at the Public Exhibition in October 2024, where certificates and prizes were presented during the Result Announcement and Prize Giving Ceremony on October 20, 2024. A total of **188 candidates** submitted their artwork for the contest.

The **Public Exhibition** was held from 14 October to 21 October 2024 at TKO Plaza. The exhibition aims to raise public awareness of the plankton in the wetland and to demonstrate the results of the project. The exhibition is a project showcase of the programme which covers the project highlights, fun facts about plankton, results of plankton surveys, awarded art pieces of the Colouring Contest and commissioned artworks. The exhibition was visited by **4410 public citizens**.

The **Result Announcement and Prize Giving Ceremony** was held on 20 October 2024. The results from the plankton blitz and the programme highlight were presented in the result announcement session. Certificates of recognition were given to the ambassadors. Prizes and Certificates were given to the awardees of the colouring contest. An exhibition guided tour was given to the awardees and their families after the ceremony.

In the Funded Programme, more than 20 plankton blitz were held with secondary school students and the public. 5 sites in Hong Kong were picked for the plankton surveys: (1) Tai Tam Bay, Hong Kong Island (2) Tsim Bei Tsui, New Territories (3) Sok Kwu Wan, Lamma Island (4) Shek Pik, Lantau Island (5) San Tau, Lantau Island. Among the 5 sites, the most common zooplankton are Copepods, Barnacle Nauplius and Veligers. Copepods, being one of the most abundant zooplankton, contributed to more than half of the zooplankton samples collected.

The school programmes received positive feedbacks where enrolled schools expressed their interests in participating in future related education programmes. Most of the ambassadors also indicated they had gained more knowledge on plankton in the programme, some suggested that further training will be appreciated. Mini research workshops on plankton can be incorporated in similar programmes in the future.

The Funded Programme successfully engaged different communities to learn about local wetland plankton and their importance to our daily lives. 10 sessions of Primary School Programme, 20 sessions of Secondary School Student Programme, 4 Public Plankton-blitz Day were held and 27 ambassadors were trained. More than 800 participants participated in the Education Programmes. With the exhibition and colouring contest, overall a total of 5420 individuals have been reached throughout this 20-month Funded Project.