



FRESHWATER AND WETLAND SECONDARY SCHOOL EDUCATION PROGRAMME

For Secondary 1 to 7 students

September 2011 to August 2012

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Learning *IN* the environment is an effective strategy for Education for Sustainable Development. The Mai Po Nature Reserve is an open-air classroom for enriching students' learning experiences by developing their interest in, understanding of and concern about OUR environment and climate change, and the relationships with us.

A. EDUCATION PROGRAMME

The Programme aims to promote understanding of wetland ecology and awareness of and concern about the conservation of Mai Po Inner Deep Bay – a Wetland of International Importance under Ramsar Convention. **SIX PROGRAMME OPTIONS** have been developed to suit students' different levels and learning needs.

1. Wetland Encounter (For Secondary 1 to 3)	The programme specially designed for junior secondary students. Students can better understand the uniqueness of wetlands through different interactive activities, including word-guessing game and photo sharing.
2. Who wants to be a Wetland Reserve Officer? (For Secondary 1 to 7)	A field-based programme which enables students to understand the basic concepts and importance of conservation management through action and participation. Students will learn basic ecological surveying techniques and participate in field works in the reserve. <i>(This programme would only be arranged on Tuesdays)</i>
3. Mangrove Ecology in Deep Bay (For Secondary 4 to 7)	Through studying mangrove ecology, students will understand the important functions of wetlands, their roles and threats under various human activities including climate change, then concern about mangrove conservation worldwide. Students will also acquire the skills to identify different mangrove species and their adaptation features.
4. Urban Planner @ Deep Bay (For Secondary 4 to 7)	This programme highlights the different land uses in and around the Ramsar Site with special focus on the historical changes and current conflicts in land use issues. This programme will also enrich students' understanding of the man-land relationship and the land use planning mechanisms in Hong Kong.
5. Wetland Ecologist (For Secondary 4 to 7)	Through interpretation, wildlife survey, field studies and discussions, students will learn about the value and importance of biodiversity, and lastly enhance awareness and concern about wetland conservation. <i>(This programme equipped with "online learning" component. Teachers and students are required to access to the e-learning platform < http://apps.wwf.org.hk/wetlandecologist/eng/ > before visit for a comprehensive learning.)</i>
6. Mai Po Multiplex (For Secondary 4 to 7)	Through introductory trip, interviews and issue-enquiry approach discussions, students will understand the effect of individual actions, social characteristics and national policies on environmental changes and their interconnectedness. Students will use real-life examples in Mai Po and Deep Bay as discussion topics, adopt multiple perspectives to analyze the causes and impacts of the issues, and to investigate the interrelationship between the issues and global events such as climate change and sustainable development.

B. EDUCATIONAL APPROACH

With an issue inquiry approach, the Programme serves as a case study for students to do Project Learning in studying environmental issues. It is conducted through a wide range of learning activities, which include role-playing, interactive games, hands-on experience, wildlife observation and identification, interpretation and debate. Visit route covers our bird watching hide(s), Mai Po Visitor Centre and Education Centre, *gei wai* and boardwalk in the Mai Po Nature Reserve and nearby fishponds (*Remark: only programme options 3 & 4 will cover Floating Boardwalk*).

Related information can be downloaded from WWF Schools and Outreach Education Programmes website
< <http://www.wwf.org.hk/en/whatwedo/education/schoolsoutreach/> >

C. BOOKING INFORMATION

Date of Programme: Weekdays, except Wednesdays and Public Holidays. (Option 2: Tuesdays only)
Time for Programme: AM Session (09:00 to 13:00 hrs) **OR** PM Session (13:00 to 17:00 hrs)
Guidance: WWF Education Officer
Group Size: **30-38 students + at least 2 teachers, but not more than 4 (except special cases)**, must accompany with students for safety and discipline control
Charge: Free of charge (Procurement of service by Education Bureau)
Application Procedure: Complete the online registration and application at <http://www.wwf.org.hk/en/whatwedo/education/schoolsoutreach/secondaryprog/>

IMPORTANT REMINDERS

- Please submit an individual online application for each programme application. Each school may apply for a maximum of FOUR Freshwater and Wetland Secondary School Education Programmes. The closing date for applications is 30 June 2011.
- In view of the limited quota available, *all applications will be processed on a first-come-first-served basis*. Schools which have not joined the Freshwater and Wetland Secondary School Education Programmes during the past two school years will enjoy priority booking.
- WWF will primarily process each school's first application, second application will be considered after reviewing the overall application status.
- Schools will be notified of their application result by **EMAIL**. If no notification received after 30 Sept 2011, please contact WWF
- For any enquiries, please contact our Administration Officer on tel. no. 2526-1011 (choose 2 for English, then press 1, 2, 1, 1) or by e-mail at ihcsc@wwf.org.hk.



FRESHWATER AND WETLAND SECONDARY SCHOOL EDUCATION PROGRAMME (F.4-7)

Mai Po Multiplex Programme Rundown

MAI PO MULTIPLEX is an outdoor “Education for Sustainable Development” Programme specially designed for New Senior Secondary Liberal Studies students. Students will be facilitated to use real-life examples in Mai Po and Deep Bay as discussion topics, adopt multiple perspectives to analyze the causes and impacts of different issues, and to investigate the interrelationship between the issues and global events such as climate change and sustainable development. Students will also understand the effect of individual actions, social characteristics and national policies on environmental changes and their interconnectedness.

By using Mai Po Nature Reserve as a learning platform, this programme aims to provide an opportunity for Liberal Studies students to understand local and international conservation issues. Apart from the field study at Mai Po Nature Reserve, which enables students to identify issues and collect information, WWF has designed teaching material for teachers to conduct pre-visit activity and post-visit follow-up with students at school, to achieve an integrated enquiry process. The three sessions are equally important and essential for a comprehensive learning experience.

BEFORE THE VISIT: Teachers are strongly advised to make use of the teaching material provided by WWF (which will be sent to teachers through email one month prior to the field study) to conduct a pre-visit activity with students at school, to provide them some background information of the issues covered before the field study. Teachers are also suggested to read through all visitor guidelines and codes issued by WWF (**Appendix 4**). Students should be briefed about programme arrangements, such as rundown, suitable outfit and regulations.

AFTER THE VISIT: Teachers are suggested to conduct a post-visit follow-up session with students by using the teaching material provided by WWF. This session aims to assist information analysis, reflection and evaluation of different viewpoints.

PROGRAMME CONTENT: The 4-hour programme will be conducted with an issue-enquiry approach through a wide range of interactive activities, including role play, interviews, discussions and presentation. The route will cover Mai Po Visitor Centre, Bird Hide, Mai Po Education Centre, Roundtable Boardwalk and nearby Fishponds (Floating boardwalk and mudflat are NOT included).

Programme Rundown*	Location	Approx. Time
1 Welcome and programme briefing <ul style="list-style-type: none"> • Registration • Introduction of wetlands and background information on Mai Po Inner Deep Bay Ramsar Site • Materials distribution (including binoculars, Wildlife ID cards) 	Mai Po Visitor Centre	40mins
2 Mai Po exploration (role play, interviews and discussions) <ul style="list-style-type: none"> • Explore the values of wetland and its functions in the ecosystem • Understand the need of wetland management • Discover the linkages between wetland and climate change • Investigate the local cultural, economic and environmental causes and impacts of land use change and hence the wise use of wetland 	Mai Po Nature Reserve	120mins
3 Reflection and debriefing <ul style="list-style-type: none"> • Understand the concept of sustainable development • Understand the interconnectedness of personal, local, national and global issues (e.g. climate change) 	Mai Po Education Centre	60mins
4 Return to Visitor Centre	/	20mins
5 End of Programme	Mai Po Visitor Centre	/
Total time		4hrs

* **Important note:** As the programme involves outdoor field studies in Mai Po Nature Reserve, the actual programme rundown on the day will very much depend on the local weather conditions (please refer to Attachment 5 *Poor Weather Condition Guidelines*) and the students' discipline. WWF reserves the right to alter the rundown without prior notice.