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Mai Po Wetland Habitats

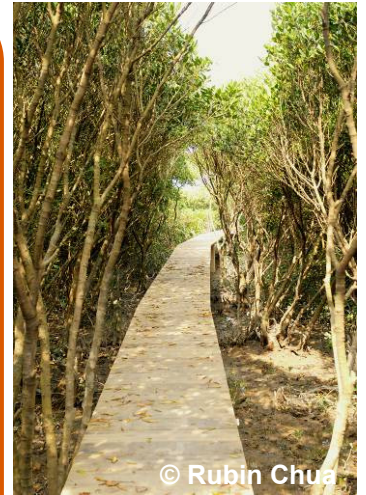
Fact sheet

Mangrove Forest

Introduction

Mangrove is a special group of plants which can be found at the inter-tidal coastal area in tropical and sub-tropical regions of the world. Eight species of native mangrove species could be found in Hong Kong, the most common one is *Kandelia obovata*. The inter-tidal environments in which mangroves grow contain an unstable substratum, high salinity variations and daily tidal fluctuations, which are not ideal conditions for plant growth, so mangroves have evolved many physiological and structural adaptations such as a waxy cuticle on their leaves, extensive root systems and viviparous droppers.

In Deep Bay, the area of mangrove is over 380ha, which is the largest in Hong Kong and the sixth largest protected stand in China. This mangrove is located at both the inter-tidal area and inside the *Gei wai*. Seven species of native mangrove are found in and around Mai Po Nature Reserve, including one species which was transplanted for education reasons.



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Collared Crow © Neil Fifer

Ecological Value

Mangrove is a habitat of high productivity and biodiversity. The substratum is rich in benthic fauna such as (Oligochaeta and Polychaeta) and shells (Gastropoda and Bivalvia) as it is nourished by plankton brought in by the daily tide. These benthic fauna and plankton are important food source for fish and shrimps which utilize the mangrove as a nursery ground.

Mangrove is also an important roosting habitat for many wildlife species. It is a roost for many resident and wintering bird species, such as Collared Crow *Corvus torquatus*, Grey Heron *Ardea cinerea* and Eastern Marsh Harrier *Circus spilonotus*. Also during high-tide when the floor of the mangrove is flooded, crabs retreat onto the mangrove tree trunk to escape rising water.

The vulnerable damselfly species, Four-spot Midget *Mortonagrion Hirosei*, has also been recorded in inter-tidal mangrove areas. Also the Leopard Cat *Prionailurus bengalensis* is known to use mangrove areas.

Our Management

Invading climber species, such as *Derris* sp., invade from the landward side of the mangrove stand. If uncontrolled it can grow extensively on top of the mangrove and severely reduce the health of those trees below. Each summer, WWF staff will clear the climbers using simple hand tools to keep the mangroves in good health.

At the seaward side, inter-tidal mangrove is threatened by two exotic mangrove species: *Sonneratia caseolaris* and *Sonneratia apetla*, which were planted at the Futian Nature Reserve on the Shenzhen side on Deep Bay. These two species are fast growing and highly reproductive, thus can easily out-compete native mangrove species. WWF-HK is working with the HKSAR government and academic institutions, to address the threat. In recent years *Sonneratia* trees have been removed by the government.