

香港濕地公園的生境管理 Habitat Management in Hong Kong Wetland Park

■ 香港濕地公園佔地61公頃，生境管理早在2003年已開始進行，旨在補償因天水圍市鎮發展而失去的濕地，並將濕地公園發展成一個結合自然護理、教育和旅遊於一身的公園。

Since 2003, habitat management has been started in the 61-hectare Hong Kong Wetland Park (HKWP). The aim is to provide various wetland habitats with enhanced ecological functions and replace the habitats lost due to development of Tin Shui Wai town.



為吸引涉禽來覓食和棲息，工作人員會定期清除泥灘上的雜草
Mudflat in the Hong Kong wetland Park is kept free of weeds for shorebirds to feed or to rest

■ 香港濕地公園採用的生境管理方法 Management Measures adopted by HKWP

植被管理 Vegetation Management

香港濕地公園除了是一個旅遊景點外，也是一個自然保護區。植被管理（灌溉、除草、剪草、施肥、栽種）會定期進行，讓保護區內的公眾路線會維持整潔和乾淨，而一些非公眾路線則會維持較接近大自然的景觀。植被管理亦提供多樣性的生境以吸引不同的野生動物，讓遊客觀察。例如工作人員定期會清除泥灘上的雜草以吸引涉禽來覓食；此外，濕地植物叢生的淡水沼澤提供隱蔽的地方給水鳥（例如白胸苦惡鳥）躲藏；樹林內雨水積成的小水澇也是季節性濕地，為青蛙、蜻蜓等動物提供棲息處。

HKWP is not only an eco-tourism attraction, but also a nature reserve for wildlife. Management of vegetation (watering, removal of weeds, grass-cutting, fertilising, planting) is carried out regularly. This keep the visitation area neat and tidy for enjoyment of visitors while areas away from the Visitor Centre are maintained a 'wild' look. The vegetation is also managed in a way to increase species diversity for wildlife and maximise wildlife sighting opportunities for visitors as well. For example, the surface of mudflat is kept free of weeds for shorebirds to feed, the freshwater marsh contains dense aquatic plants for shy waterbirds (e.g. White-breasted Waterhen) to hide, and rainwater forms seasonal ponds among the woodlands for frogs and dragonflies to breed.



香港濕地公園在不同的生境採用不同的管理方法，為野生動物提供棲息處
Hong Kong Wetland Park adopts different measures to manage habitats for wildlife

水位和水質控制

Control of Water Level and Quality

香港濕地公園在淡水(沼澤和水池)和鹹淡水(泥灘)濕地設有水閘和水泵以維持水位在一個適當的高度。水的高度對植物的生長和吸引雀鳥的到來有一定的影響。

公園的濕地保護區有一片蘆葦床，所有流入淡水沼澤的水都會流過這片蘆葦床，以過濾水中的懸浮固體和吸取多餘養份(污染物)從而提升水質。自2003年開始監察水質以來，水質一直都令人滿意。

Water levels of freshwater (marshes and ponds) and brackish (mudflat) wetlands are maintained at suitable levels by controlling weirs and pumps. This is crucial for growth of plants and also for attracting waterbirds.

Wetland Reserve of HKWP has a reedbed filter for polishing the water quality of freshwater marshes. The reedbed traps suspended solids and absorbs excessive nutrients. The water quality is satisfactory since monitoring has started in 2003.



蘆葦床是一個天然的濾水器。淡水會先經過磚床、蠔殼床、蘆葦床然後進入淡水沼澤

Reedbed acts as a natural filter. Water passes through the brick and oyster shell bed, then the reedbed and finally reaches freshwater marsh

淡水沼澤設有水閘以維持水位在適當的高度

Water in freshwater marsh is maintained at suitable levels by controlling weirs



人工巢箱

Artificial Nests for Wildlife

2003年開始，我們放置了不同大小的人工雀鳥巢箱。曾經使用巢箱的雀鳥包括領角鴞、斑頭鵯、大山雀和鷓鴣。為免使用巢箱的雀鳥受到騷擾，大部分巢箱都遠離公眾使用區。

Since 2003, artificial nest boxes in different sizes have been installed for birds. They are successfully used by Collared Scops Owl, Asian Barred Owlet, Great Tit and Magpie Robin. To avoid disturbance to breeding birds, the boxes are mostly placed away from the visitation area.



不同大小的巢箱可吸引不同種類的雀鳥，例如領角鴞

Nest boxes in different sizes are used to attract different species of birds, for example Collared Scops Owl

工作人員於雀鳥繁殖季節定期進行巢箱調查工作

Surveyors conduct regular surveys during breeding season of birds to monitor the usage of artificial nests

我們亦設置了蝙蝠巢箱，為蝙蝠提供一個棲息處。大部分的蝙蝠巢箱也是遠離公眾使用區的，蝙蝠巢箱也可在原野漫遊徑的蝴蝶園附近找到。曾使用巢箱的蝙蝠包括東亞家蝠。

Bat boxes have also been installed to provide artificial roosts for bats. Like the bird boxes, the bat boxes are installed in the woodlands away from visitors, but some can still be found near the butterfly garden at Wildside Walk. Japanese Pipistrelles have been recorded roosting in our bat boxes.



日間，蝙蝠會留在蝙蝠巢箱內休息
Bat box provides roosting places for bats in daytime

清理福壽魚
Removal of Nile Tilapia



義工協助清理薇甘菊
Volunteers are removing Mile-a-minute Weed

外來物種的控制 Control of Alien Species

清除外來物種是一件需要大量人力的工作。蔓延四野的薇甘菊，會遮蔽其它植物，防礙吸收陽光，最終令它們死亡。消除薇甘菊最有效的方法是直接用手拔除，這有賴義工的幫助。福壽魚和福壽螺也是令生態工作者困擾的外來物種，牠們都是進食水生植物的，我們必須定期清除牠們。

Removal of alien species from HKWP is a labour-consuming work. The climber, Mile-a-minute Weed (*Mikania micrantha*) can rapidly cover large areas of trees and shrubs, block the sunlight and eventually kill the plants underneath. Mikania can only be effectively removed by hand, and we rely on our volunteers to help. Nile Tilapia and Golden Apple Snail are also notorious alien species, which feed on submerged plants and floating leaves. We used to regularly remove them from the ponds.

栽種植物以改善生境 Planting for Habitat Enrichment

在建設本公園時，我們在溪畔漫遊徑和演替之路種植了各種果樹，為雀鳥和蝙蝠提供食物，同時也在原野漫遊徑為蝴蝶種植寄主植物和蜜源植物。淡水沼澤裡栽種了挺水植物讓蜻蜓稚蟲爬離水面並羽化為成蟲。我們會繼續在公園內栽種，特別是原生植物，以增加植物的多樣性。

During construction of HKWP, fruit trees were planted for birds and bats at Stream Walk and Succession Walk. Larval food plants and nectar plants for butterflies were planted at Wildside Walk. Tall emergent plants are planted along the water edges of freshwater marsh to allow dragonfly nymphs to climb out of water to emerge. We are continuously adding plants to the site, especially native species, in order to increase the diversity of plants.



在原野漫遊徑開闢了蝴蝶園，提供寄主植物和蜜源植物
A butterfly garden is developed at Wildside Walk to provide larval food plants and nectar plants for butterflies



印支林鼠
Indochinese Forest Rat



短吻果蝠
Short-nosed Fruit Bat



斑腿泛樹蛙
Brown Tree Frog



工作人員定期收集野生生物的資料
Information of wildlife is collected regularly by staff

監察 Monitoring

本公園會定期記錄在不同生境的雀鳥、魚類、哺乳動物、兩棲動物、爬行動物、蜻蜓、蝴蝶、蟹和植物的數目。這些監察工作有助我們瞭解植物和動物品種隨著季節的轉變，以及發掘本公園是否存在稀有物種和適合牠們棲息的地方。監察的結果有助評估本公園的人工濕地的成效，並確定該地能否吸引野生生物棲息，以及點出提供一些如何改善這片濕地的保育操拖。

Regular surveys are conducted to monitor diversity of birds, fishes, mammals, amphibians, reptiles, dragonflies, butterflies, crabs and plants occurring in different habitats in HKWP. The surveys help us to note seasonal changes of plants and animals, also the presence of rare species and the habitats they utilized. The survey results revealed successfulness of the re-created wetlands in attracting wildlife, and identified necessary conservation actions to improve the habitats.

遊客秩序管理 Control of Visitor Impact

假日的人流較多，為減低遊客對野生生物的騷擾，工作人員會種植喬木、灌木和長草作為屏障。觀鳥屋門口亦設置屏障和指示牌，以提醒遊客「雀鳥也有耳朵」，希望減少對動物的影響。

On weekends, the Park is busy with large number of visitors. To reduce visitors' disturbance to wildlife, tall grass, shrubs or trees are planted at various locations as screens. Barriers were installed and notices such as 'Birds have Ears' were put up at bird hides remind visitors, so as to minimise their disturbances.



香港濕地公園週末遊覽的人流眾多
HKWP attracts a large number of visitors during weekends