



# 濕地現存及潛在的危機 Wetlands - Existing and Potential Impacts

■ 世界各地遍佈多種不同濕地生境,每片濕地對人類及 野生動物都十分重要。可是,各種人類活動正為濕地 帶來不同程度的威脅。以下列出的是一些濕地面對著 的挑戰。

Diverse wetland habitats are found around the world. These wetlands are important to human as well as wildlife. However, many of them have been degradated as a result of various human activities. Here, we list some examples of the challenges that our wetlands face.



#### 水壩 Dams

人類在河流建造水壩,設置水庫儲水進行水力發電。 建造水壩會分隔動物的活動範圍,割裂河流的生態系統,堵塞動物的遷移路線。再者,工程令河道水位上 升,淹沒河邊的肥沃農田,當地居民被逼遷離故土; 上升的水位更淹沒沿河的不同生境或改變流域,令動 物失去居所。

Dams are built across rivers for storing water and facilitating the generation of hydroelectric power. However, the dams become barriers to the movement of animals and cause fragmentation of the ecosystem. In addition, dams construction cause rises in water level, not only the fertile farmlands along the river were submerged, people are forced to leave their homelands, but also habitats along the river are destroyed, organisms lost their homeland.



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#### 渠道工程 Channelisation

過去十年,渠道工程已把香港超過百分之六十的河流 改道。許多河道因防洪和城市建設的需要而被拉直及 渠道化。由於天然河流的水文系統被永久改變,原有 的淡水濕地多樣性亦因而大大減少。此外,鋪設混凝 土及挖掘淤泥的工程,亦減低生境結構的複雜性。

Channelisation in the last decade has diverted over 60% of Hong Kong rivers. Many watercourses have been straightened and channelised for flood control and for urban developments. However, this is detrimental to local freshwater biodiversity, as it causes irreversible destruction to natural stream habitats by permanently altering the hydrology. It also reduces habitat complexity by concrete-lining and desilting.



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# 外來入侵物種 Alien Species

在香港,有些外來物種被刻意地引入作為食品或園 藝品,有的則作為寵物或宗教放生的動物,也有些 外來物種隨進口物品被意外地引入。部份引入品種 由於沒有天敵及捕食者克制而迅速繁殖,因而危害 本地野生物種的生長,對生態環境造成不能逆轉的 影響。

In Hong Kong, exotic species are introduced deliberately as food, ornamental plants, pets or animals released in religious ceremonies; some are introduced accidentally with imported goods. Some introduced species reproduce vigorously as they are not restrained by their natural predators. As a result, they grow wild unchecked and lead to irreversible impacts on native and endemic species.



入侵紅火蟻是從南美洲引入 Red Imported Fire Ants (Solenopsis invicta) were introduced from South America

## 捕殺野生動物

#### Too Much from the Wild

人類捕殺魚類作為食物。可是,破壞性捕魚(例如:利用炸藥和氰化物等方法捕魚)會殃及非目標魚類或意 外遭捕獲的動物,從而影響生物多樣性。另外魚類也會用在水族買賣、製藥(例如:海馬)或製成紀念品(例如:河豚)。

其他濕地野生動物也被捕捉作食物(例如:海龜蛋)、藥物(例如:三線閉殼龜)或製作皮革製品(例如: 鱷魚皮)。這些動植物越罕有,便越昂貴,迫使牠們瀕臨絕種。

Fishes are caught mainly for food. Unwanted fishes and other wildlife are also killed by destructive fishing means, such as using dynamite or cyanide, these cause significant impact on biodiversity. Fishes are also caught for the aquarium trade, traditional medicines (such as seahorses), and souvenirs (such as puffer fish).

Besides, other wetland wildlife is also hunted for delicacies (e.g. sea turtle eggs), medicines (e.g. Three-banded Box Terrapin) and leather products (e.g. crocodile skin). The rarer the species, the higher the prices, and the faster their extinction rates.



三線閉殼龜常被捕殺製成傳統中藥,故此被列入受保護名單中 Three-banded Box Terrapins need protection as they are collected for producing traditional Chinese medicine



鰮魚皮可作為皮革製品,而鰮魚肉則可作為食品或藥材,使物 們瀕臨絕種

Crocodiles are collected for producing food, leather products and medicines, thus pushing them towards the edge of extinction

#### 用水太多

#### Using too much Freshwater

我們的生活質素取決於是否獲得安全和穩定的食水供應。1940年至今,全球人口增加兩倍,用水量亦增加了四倍。過度開採水源會導致某些濕地乾涸。可是,人口增加、工業和農業發展都增加了對食水供應的壓力。根據水務署資料,在2005至2006年度,香港人的用水量約為十億立方米。

Our quality of life depends on a safe and stable water supply. Population growth, agricultural and industrial developments are increasing and this means extra pressure on water supplies. According to research, water consumption worldwide has quadrupled as the world population doubled since 1940. Over-extraction of water causes wetlands to dry out. In the year of 2005 to 2006, Hong Kong people consumed about a thousand million cubic meters of freshwater.

#### 火 Fire

山火或森林大火會嚴重破壞植被,減低植物物種的多樣性並使野生動物失去棲息地。除此之外,缺乏植被的保護,沙土容易被沖到附近的河溪,增加當中的懸浮物濃度,影響水生動物(特別是固生的雙殼貝類動物)的呼吸。泥炭沼積聚大量含碳的易燃物質,若發生大火,情況往往難以控制。失控的山火亦會產生大量溫室氣體,加劇全球暖化的效應。

Hill fires or forest fires remove vegetation of the affected area. This reduces the diversity of plants and destroys wildlife shelters. In addition, exposed soil will be more easily to get washed into waterways, thus threatens life of aquatic animals (especially the sessile bivalves). The peat bog swamps are rich in high carbon content materials which are highly flammable. Once it ignites, it is hard to control. Fires generate a huge amount of green house gas, and aggravate the effect of global warming.

# 受威脅的紅樹林 Mangrove Destruction

紅樹林是世界上其中一種最受威脅的生境之一。紅樹 林會因城市發展(住宅、商業或工業)、傾倒廢物或 污染物而遭受破壞,令生境質素降低。

Mangrove forest is one of the most threatened habitats in the world. Mangroves are damaged by urban development (residential, commercial or industrial), dumpings or pollutants washed into the sea which degrade the habitat further.



紅樹林被砍伐 Felled mangrove



紅樹林及附近濕地因城市發展逐步縮小面積 Area of mangrove and nearby wetlands were reduced by urban development



沿岸紅樹林的面積因道路建設而逐步縮小
The area of mangrove coverage at the coastal area was reduced by road development

## ■ 受威脅的珊瑚礁 Coral Reefs in Danger

珊瑚對環境改變非常敏感,例如海水溫度因全球天氣 變暖而上升,會危害整個珊瑚群落的健康狀況。其他 危害珊瑚的因素還包括:水質受工業和農業溢流所污染、被沉積物所覆蓋、被廢棄漁網纏繞、被船錨或粗心大意的潛水人士毀壞,以及被收藏者採集等。

Coral is extremely sensitive. Slight changes in the environment such as an increase in seawater temperature resulting from global warming is likely to have detrimental effects on the health of the entire coral communities. Some coral reefs are damaged because of the pollution of seawater by industrial waste, runoff from farmlands, smothering by sediment, entanglement by abandoned fish nets, damaging by boat anchor or careless divers, or being removed by collectors.



香港水域已記錄多達84個珊瑚品種 Around 84 species of corals have been found in Hong Kong waters

#### ■ 我們能做甚麼? What Can We Do?

濕地是野生動物的重要生境,我們須善用大自然的資源、節省用水,為保護濕地環境盡一分力。

Wetlands are high-valued habitats for our survival as well as survival of wildlife. We should use our natural resources wisely, save water and protect the wetland environment.

