

由「山」到「海」的香港常見野生生物  
Commonly found wildlife in Hong Kong from Ridge to Reef



主辦機構 Organised by

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大自然保護協會

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|--|--|--|--|---|---|
| 1 金錢魚 (金鼓) Spotted scat ( <i>Scatophagus argus</i> )         | 6 香港蠔 Hong Kong oyster ( <i>Magallana hongkongensis</i> )      | 11 廣東彈塗魚 Common mudskipper ( <i>Periophthalmus modestus</i> )          | 16 小白鷺 Little egret ( <i>Egretta garzetta</i> )                    | 21 銀合歡 River tamarind ( <i>Leucaena leucocephala</i> )      | 26 野豬 Wild boar ( <i>Sus scrofa</i> )                           |
| 2 瀨尿蝦 Mantis shrimp ( <i>Stomatopoda</i> )                   | 7 小環鴉 Little ringed plover ( <i>Charadrius dubius</i> )        | 12 青彈塗魚 Blue mudhopper ( <i>Scartelaos histophorus</i> )               | 17 黑鳶 Black kite ( <i>Milvus migrans</i> )                         | 22 蒼鷺 Grey heron ( <i>Ardea cinerea</i> )                   | 27 黑眶蟾蜍 Asian common toad ( <i>Duttaphrynus melanostictus</i> ) |
| 3 貝克喜鹽草 Beccarii's seagrass ( <i>Halophila beccarii</i> )    | 8 白頸鴉 Collared crow ( <i>Corvus torquatus</i> )                | 13 大米草 Smooth cordgrass ( <i>Sporobolus alterniflorus</i> )            | 18 白胸苦惡鳥 White-breasted waterhen ( <i>Amaurornis phoenicurus</i> ) | 23 豬籠草 Pitcher plant ( <i>Nepenthes mirabilis</i> )         | 28 兩面針 Shiny-leaved prickly ash ( <i>Zanthoxylum nitidum</i> )  |
| 4 蠣鶻 Eurasian oystercatcher ( <i>Haematopus ostralegus</i> ) | 9 中國蟹 Chinese horseshoe crab ( <i>Tachypleus tridentatus</i> ) | 14 老鼠簕 Spiny bear's breeches ( <i>Acanthus ilicifolius</i> )           | 19 秋茄樹 -- ( <i>Kandelia obovata</i> )                              | 24 芒萁 Dichotomy forked fern ( <i>Dicranopteris pedata</i> ) | 29 紅鋸蛺蝶 Red lacewing ( <i>Cethosia biblis</i> )                 |
| 5 石蠔 Rock oyster ( <i>Saccostrea cucullata</i> )             | 10 弧邊招潮蟹 Fiddler crab ( <i>Uca (Tubuca) arcuata</i> )          | 15 圓尾蟹 Mangrove horseshoe crab ( <i>Carcinoscorpius rotundicauda</i> ) | 20 普通翠鳥 Common kingfisher ( <i>Alcedo atthis</i> )                 | 25 黑尾灰蜻 Common blue skimmer ( <i>Orthemtrum glaucum</i> )   | 30 蒲桃 Rose apple ( <i>Syzygium jambos</i> )                     |

此圖表中的野生生物插圖和風景並非按同一比例繪製。The wildlife illustration and landscapes in this chart are not drawn to scale. 繪圖: Illustrated by Nicole Kit



## Some of the Habitats That Can Be Found in Hong Kong

Usually refers to habitats higher than 500m, such as Tai Mo Shan (957m) and Castle Peak (583m) in Tuen Mun.



Refers to habitats dominated by shrubs, usually developed from grasslands in ecological succession. Many hillside areas in Hong Kong are shrublands, such as Shing Mun Country Park. Shrubs are perennial woody plants with multiple stems and shorter height.



Sometimes also called croplands, refers to the lands that cultivate crops, such as San Tin and Pat Heung in Yuen Long. The wildlife and ecological values of farmlands depend on the types of crops that are grown.



**Landform features of middle courses:**  
Meander, river cliff, slip off slope



Refers to the partially enclosed coastal body with one or more streams flowing into it that is freely connect to the sea. Because it is continuously affected by the tide and river discharge, this area is in brackish water and has high nutrient content, making it a highly productive natural habitat. Hong Kong is located in the Pearl River Estuary.



Refers to area where mud made of fine sediments is deposited from the tides or rivers, mostly found in sheltered intertidal areas such as Pak Nai.



Areas when oyster farmers traditionally cultivate oysters. This is called "bottom cultivation": bare substrate is laid out on the mudflat, allowing oyster larvae in the water column to settle naturally and are then harvested after three to four years. Although it has been modified and abandoned, live oysters remain and form an ideal habitat for many wildlife.



## Terrestrial Ecosystems



Refers to habitats dominated by trees, such as Mui Tsz Lam in Ma On Shan and Nam Sang Wai in Yuen Long. Woodlands usually develop from shrublands in ecological succession. Trees are perennial woody plants with a single main stem and branches developed far from the ground.



Refers to the habitats dominated by grass, usually belonging to the family Poaceae. Tap Mun in Sai Kung and Ngong Ping in Ma On Shan are some examples of grasslands. Grass is often one of the first few types of simple plants that can be grown on the environment after a hill fire burn or human disturbance in ecological succession.



River refers to the freshwater streams that connect the terrestrial environment and the sea, such as Tung Chung River and Lam Tsuen River. Different tributaries will collect the rainwater from the drainage basin and form a mainstream. It can be classified into upper, middle and lower courses.

**Landform features of upper course:** Interlocking spur, waterfall, gorge, V-shaped valley



**Landform features of lower courses:** Oxbow lake, braided stream, floodplain, levee, delta



Refers to habitats dominated by mangroves and are usually found in sheltered upper intertidal zones next to estuaries. Mangroves are plants that can adapt to growth in brackish water. Mai Po in Deep Bay has the largest mangrove habitat in Hong Kong.



Refers to habitats dominated by seagrass and can be found in shallow and sheltered soft-bottom marine coastal areas usually next to estuaries such as Pak Nai. Seagrass beds are not common in Hong Kong.



Areas when oyster farmers cultivate oysters today. This is called "raft cultivation": ropes with attached oyster larvae, or spat, are hung under the rafts. The oysters are allowed to grow naturally floating in the water. Usually, oysters will grow faster in "raft cultivation" than "bottom cultivation".



A **habitat** is the place where an organism lives. It provides the conditions that the organism needs to survive. A habitat or a group of related habitats can be considered an ecosystem. Habitats change over time.

An **ecosystem** is a dynamic complex of living components (biotic factors, e.g. organisms) and non-living components (abiotic factors) interacting together, forming a stable and self-supporting system in a specific area. This is the functional unit in ecology.

Can you point out some of the ecosystems and habitats listed above in the opposite-sided wildlife identification chart? Are any of these habitats found near your home?



## Our Ocean

Similar to the forests and other terrestrial ecosystems, the ocean also provides a lot of ecosystem services to us. The ocean covers more than 70% of our planet's surface.



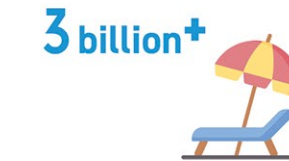
More than 90% of the excess heat energy stored by the Earth over the last 50 years is found in the ocean.



Marine phytoplanktons account for more than 50% of oxygen production on Earth.



Fish is an important source of animal protein for human beings; it accounts for about 17% of protein at the global level and exceeds 50% in many developing countries.



More than three billion people rely on the ocean for their livelihoods, such as in the ecotourism and fishing industries.

## Our Ocean is Now Under Threat



**Water pollution:** In Hong Kong, household and industrial sewage will eventually discharge into the sea. Even though the sewage collected in urban areas is treated before it is discharged, it is very hard to process the sewage back to cleanliness levels. In addition, some farmers in the New Territories are practicing inorganic farming, and sometimes their chemical fertilizers are washed downstream during rainfall, ending up on the coast and in the sea. These washed chemical fertilizers are considered pollutants and can cause algal blooms in the sea if they are in high concentrations.



**Marine litter:** Marine litter consists of non-natural items that have been made or used by people and discarded into the sea or rivers or on beaches. Most marine litter come from land-based activities: a new study shows that around 1,000 of the world's rivers are the source of 80% of the global ocean plastic pollution. Marine litter can be the cause of death for many marine creatures if they are ingested or become entangled.



**Over-exploitation of biological resources:** We consume biological resources from the ocean every day, from water sources to seafood to fresh air. However, not all consumed resources are sustainable. For example, Hong Kong was once a fishing village full of fishery resources. However, due to the past few decades of overfishing and unsustainable fishing practices, our fishery resources have declined.



**Invasive species:** Invasive species, such as the Sabah grouper and common cordgrass, are species that are new to Hong Kong ecosystems and are introduced accidentally through transportation of goods or intentionally through deliberate release. As new invasive species come to Hong Kong, they compete for resources with native species and can spread out exponentially at a rapid rate. This can be even worse if there are no natural predators to control invasive species.



**Coastal development:** Land reclamation have been used in Hong Kong for a long time to increase limited land supply for new housing and infrastructures. Land reclamation completely cover the coastal shorelines and destroy habitats for wildlife. More than 67 km<sup>2</sup> have been reclaimed so far, accounting for about 6% of Hong Kong's total land areas.

What kinds of personal habits can we change to avoid troubling our oceans?



## Why Do We Need to Protect Our Nature?

Do you know what kind of natural resources we are using and consuming every day?



### Ecosystem Services

Human beings receiving a wide range of direct and indirect resources from the ecosystems; these are called "Ecosystem Services". These resources include:

**Provisioning Services:** Provision of food, freshwater, raw materials such as timbers and rocks, and medicines.

**Cultural Services:** Non-material benefits, such as nature providing spaces for us to conduct recreational activities and ecotourism.

**Regulating Services:** Regulation of the climate, purification of air, wastewater filtration, greenhouse gas sequestration, and soil erosion prevention.

**Supporting Services:** Support other ecosystems, such as providing nursery ground for wildlife and conducting nutrient, water and carbon cycles.

## How to Protect Our Nature? "Ridge to Reef" Conservation Approach

### Ridge to Reef

Through rivers and streams, everything that happens on land (e.g. sewage and litter) will have an impact downstream, including intertidal habitats and eventually, the sea. The ocean and intertidal wetlands are ecosystems with rich biodiversity, so healthy and clean rivers and streams are crucial to maintaining healthy estuaries, coastal areas, wetlands, coral reefs, and oyster reefs. Therefore, the International Union for Conservation of Nature (IUCN) proposed the "Ridge to Reef" conservation initiative to link river basins from land to coast to better manage water resources and ecosystems.



### Implementing "Ridge to Reef" Conservation for Hong Kong

The "Ridge to Reef" initiative also applies to Hong Kong, because it is a coastal city and home to more than 1,000 marine fish species, 198 freshwater fish species, 86 reptile species, 84 hard coral species, 67 soft coral and gorgonian species, 24 amphibian species, the Chinese white dolphin and the finless porpoise. Proper management of freshwater, coastal and marine ecosystems can help protect local wildlife and ensure sufficient ecosystem services to support our lifestyles and livelihoods.

## The Jockey Club "Ridge to Reef" Environmental Education Programme

### Project brief

Building on IUCN's global conservation initiative, The Nature Conservancy (TNC) launched the Jockey Club "Ridge to Reef" Environmental Education Programme, with support from The Hong Kong Jockey Club Charities Trust. The holistic program aims to enhance the environmental literacy of Hong Kong's youth. Using TNC's Learn-Act-Lead model, we are working with Hong Kong's students, teachers and schools.



Project webpage



Free online education resources



Ridge to Reef animation and virtual field trip:

