

Country Parks and Conservation

COUNTRY PARKS

Although Hong Kong is one of the world's metropolises, it has a great deal to offer scenically — a landscape rising from sandy beaches and rocky foreshores to heights of almost 1 000 metres, woodlands and mountain ranges covered by open grassland and a variety of scenic vistas rarely, if ever, matched in so small a territorial unit.

The Country Parks Ordinance provides a legal framework for the designation, development and management of country parks and special areas. It provides for the establishment of a Country and Marine Parks Board to advise the Director of Agriculture, Fisheries and Conservation on all matters related to country parks and special areas.

A total of 24 country parks have been designated for the purposes of nature conservation, countryside recreation and outdoor education. There are 22 special areas created mainly for the purpose of nature conservation.

The Parks: The country parks and special areas cover a total area of 44 312 hectares. The country parks comprise scenic hills, woodlands, reservoirs and coastline in all parts of Hong Kong. The Agriculture, Fisheries and Conservation Department (AFCD) manages the parks and is responsible for tree planting, plantation enhancement, conservation education, fire prevention and fighting, keeping country parks clean, development control and provision of recreation and education facilities. The country parks are very popular with all sectors of the community and spending a day in a country park is accepted by many as one of the best recreational choices in town. Some 13 million visitors were recorded in 2023 and most visitors engaged in hiking, leisure walking, fitness exercise, barbecuing, camping and family outings etc.

Facilities: Park facilities provided in recreational sites include tables and benches, barbecue pits, litter bins, shelters, campsites, water filling stations and toilets — all carefully designed to blend in with the environment.

Footpaths and country trails provide easy access to the hills and the woodlands for visitors to enjoy the scenic beauty of these areas. Major paths are regularly improved and waymarked. The four long-distance hiking trails are very popular among hikers. The MacLehose Trail (100 kilometres) traverses the New Territories from Sai Kung in the east to Tuen Mun in the west. The Lantau Trail (70 kilometres) is a circular trail on Lantau Island. The Hong Kong Trail (50 kilometres) traverses all the five country parks on Hong Kong Island. The Wilson Trail (78 kilometres) stretches from Stanley in the south of Hong Kong Island to Nam Chung in the north New Territories.

Education and Visitor Services: Leaflets and pamphlets were published to help visitors enjoy and understand the country parks. The Lions Nature Education Centre at Tsiu Hang Special Area in Sai Kung is a special attraction to visitors as it consists of both indoor and outdoor thematic displays of vegetables, rocks and minerals and other local vegetation. The Woodside Biodiversity Education Centre in Quarry Bay introduces Hong Kong's precious nature resources and biodiversity. Interpretative signs are installed along nature trails and tree walks to introduce plants and animals in the country parks and their ecology. Members of the public may access information about country park hiking trails on the "Enjoy Hiking" website. The "Enjoy Hiking Hiker Tracking Service" mobile application will record users' hiking locations which may be retrieved from the system to expedite the rescue operation should any accidents occur.

Furthermore, AFCD also organises community-involved conservation programmes, including "Take Your Litter Home", "Hiking Etiquette" Public Education and Publicity Programmes, Country Park Nature Interpretation Programme, Orienteering Programmes, "Countryside Adventure" Kindergarten Education Scheme, School Visit Programme, Country Parks Volunteer Scheme and other "Nature in Touch" educational activities.

MARINE PARKS

The Marine Parks Ordinance protects and conserves the marine environment and a rich collection of marine animals and plants, such as corals, sea grasses and dolphins. The ordinance also provides the legal framework for the designation, control and management of marine parks and marine reserves. The Marine Parks and Marine Reserves Regulation provides for the prohibition and control of certain activities in marine parks and marine reserve.

The Parks/Reserve: There are seven marine parks and one marine reserve covering a total sea area of 6 117 hectares. They comprise scenic coastal areas, seascapes and important marine habitats.

Marine parks are managed with an approach of multiple use for conservation, education, recreation and scientific studies. Only activities compatible with the objectives of marine parks would be allowed. Diving, snorkeling, canoeing, sailing, underwater photography and school visits are popular activities in marine parks. Activities destructive to marine environment and coastal features such as unauthorised fishing, hunting or collecting of marine life are prohibited. On-site information boards, mooring buoys and boundary light buoys etc are installed. Educational activities such as guided tours and public lectures are regularly organised to enhance

the public's sense of conservation of marine environment. The Hoi Ha Visitor Centre, which is adjacent to the Hoi Ha Wan Marine Park, has an exhibition hall which provides visitors with information about the marine park and the rich marine biodiversity in Hong Kong. The marine reserve is strictly protected for nature conservation, scientific research and educational studies, hence no recreational activities are allowed.

GEOPARK

Hong Kong Geopark is located in the east and northeast parts of Hong Kong, comprising the Sai Kung Volcanic Rock Region and the Northeast New Territories Sedimentary Rock Region, with a total land area of over 150 km².

The Sai Kung Volcanic Rock Region is the relic of a 140-million-year old supervolcano. Among the diverse geoheritage in the region, the most important is the rhyolitic volcanic hexagonal columnar rock formation. The rock columns are 1.2 metres in diameter, on average, with the biggest ones measuring three metres across, and they are tens of metres high above ground, with a land-and-sea distribution of approximately 100 km². The distribution, column size and rock type of the formation are globally rare. In combination with the diverse coastal erosion landforms in the area, the rock columns form a magnificent natural landscape. The columnar rock formation is selected as one of the First 100 International Union of Geological Sciences (IUGS) Geological Heritage Sites in 2022, which recognizes its international importance. The major geosites in the Sai Kung Volcanic Rock Region are the High Island Reservoir East Dam, Tai Long Wan and Sharp Island. High Island, Kau Sai Chau and Yim Tin Tsai are the rural communities in this region.

The Northeast New Territories Sedimentary Rock Region is home to a complete sedimentary rock sequence, formed 400 to 55 million years ago, from the Palaeozoic to the Cenozoic. It is a rich showcase of sedimentary rocks, geological structures and fossils. This region also offers a host of diverse habitats, which support high biodiversity. The Hakka and fishing villages distributed across the region pride themselves on their rich history and cultural heritage. The main geosites are Ma Shi Chau, Lai Chi Chong, Bride's Pool and Tung Ping Chau, and the main rural communities are Lai Chi Wo, Kat O and Ap Chau.

Conservation, Education and Sustainable Development:

Hong Kong Geopark has worked closely with all stakeholders to conserve the geological and ecological heritage in the area and organise a wide range of education activities to popularise earth science. The geopark communities are also engaged in a cultural and intangible heritage conservation project to explore and preserve the vibrant local history and culture. The project not only enhances our promotional and educational contents, but also provides new resources for local green tourism.

Hong Kong Geopark has designed 13 land excursion routes and two boat tour routes, and established a geopark visitor centre, a volcano discovery centre, a geoheritage centre and five geopark community story rooms. All these

centres provide geopark and geotour information for visitors, popularise earth science, and promote the natural and cultural heritage of the geopark, in furtherance of green tourism and the sustainable development of the geopark communities.

Networking: Hong Kong Geopark participates actively in exchanges with other UNESCO global geoparks, hosting exchange forums, and organising workshops and training programmes for global and Asia Pacific geoparks.

CONSERVATION

The nature conservation policy is to regulate, protect and manage natural resources that are important for the conservation of biodiversity of Hong Kong in a sustainable manner, taking into account social and economic considerations, for the benefit and enjoyment of the present and future generations of the community. The first city-level Biodiversity Strategy and Action Plan for Hong Kong was published in December 2016, to step up conservation efforts and support sustainable development.

The proportion of land area put under the protected area system in Hong Kong compares favourably with other cities/places at similar stage of economic development. Moreover, despite its small size and rapid development over the years, Hong Kong still enjoys a rich biodiversity. The AFCD, through its territory-wide survey programme, identifies and monitors the important components of biodiversity in Hong Kong. The AFCD also publishes field guides and maintains the Hong Kong Biodiversity Online (www.hkbiodiversity.net), Hong Kong Biodiversity Information Hub (bih.gov.hk) and social media platforms (e.g. "Mr. B Nature Classroom" Facebook and Instagram pages) to introduce Hong Kong's biodiversity to the community.

Habitat Protection: About 40 per cent of land in Hong Kong has been designated as country parks and special areas which provide statutory protection for the habitats of diverse flora and fauna. In addition, 67 Sites of Special Scientific Interest (SSSIs) have been listed to recognise the scientific importance of these sites. For example, Ma On Shan and Sha Lo Tung have been listed as SSSIs in recognition of the presence of the diverse populations of azaleas and dragonflies in Hong Kong respectively. Due consideration to conservation is given when developments in or near these sites are proposed.

The AFCD also implements active conservation programmes to enhance important habitats. These include the implementation of Plantation Enrichment Programme in country parks and management of vegetation in forests, egretries and SSSIs.

Flora: The flora of Hong Kong is diverse in character and surprisingly rich in species. Many typical species of the Southeast Asian tropical flora are seen here at the limit of their northern distribution range. More than 3 300 species and varieties of vascular plants have been recorded in Hong Kong, approximately 2 100 of which are native and the rest are introduced or of exotic origin.

Hong Kong Herbarium: Established in 1878, the AFCD's Hong Kong Herbarium is responsible for the systematic collection, identification and curation of plant specimens of the Hong Kong flora. The Herbarium also publishes the Check List of Hong Kong Plants, herbarium leaflet series and other related technical publications (e.g. Flora of Hong Kong). It plays a significant role in supporting the studies on taxonomy, ecology and conservation of Hong Kong flora. Currently it houses approximately 50 000 plant specimens and is equipped with a specialised library and a plant database (herbarium.gov.hk) to support its function.

Conservation of Flora: Efforts have been made to conserve native flora in Hong Kong. In addition to habitat protection, they are also conserved through the following approaches.

Species Protection: Under the Forests and Countryside Ordinance, damaging plant in any forest or plantation on government land is prohibited. Some rare and attractive species such as *Camellia* species, *Enkianthus quinqueflorus*, *Iris speculatrix* and *Impatiens hongkongensis*, are specifically listed in the Forestry Regulations to control their sale and possession.

Propagation: Various methods such as seed collection, cutting, air layering, etc, have been used to propagate Hong Kong's native flora including rare and endangered species in the AFCD's plant nursery. The seedlings are planted in the countryside for enriching local biodiversity. Rare species successfully propagated include *Keteleeria fortunei*, *Camellia crapanelliana* and *Camellia granthamiana*.

Ex-situ Conservation: A base for flora conservation has been set up at the Shing Mun Arboretum. About 300 species representative to the native flora, including some rare and endangered species have been propagated and established there for conservation and education purposes. A greenhouse has also been set up for conservation of fragile species and orchids.

Terrestrial Mammals: Hong Kong has 55 species of terrestrial mammals. It is not uncommon to hear Barking Deer call or catch a glimpse of East Asian Porcupine in the woods at night. Large mammals like Leopard Cat, Small Indian Civet and Masked Palm Civet can even be spotted, if one is lucky enough. Eurasian Wild Pigs are common in the wooded areas but may occasionally wander into the adjacent residential or public areas when searching for food.

Unlike others, Rhesus Macaques are easily seen in Kam Shan and Shing Mun Country Parks. Visitors are reminded not to feed monkeys or other wild animals as it is illegal, and uncontrolled feeding can lead to unnatural population growth and caused nuisances.

Smaller mammals such as Pallas's Squirrel, Chestnut Spiny Rat and Musk Shrew are commonly encountered in rural areas, whereas bats, which constitute almost half of the terrestrial mammal species in Hong Kong, are often found near caves and water tunnels. Common species include Himalayan Leaf-nosed Bat, Chinese Horseshoe Bat and Greater Bent-winged Bat.

Birds: Hong Kong is a major stopover point for migratory birds in East Asia. The wide variety of local habitats including wetlands, grasslands, woodlands, seashores and farmlands contributes to the diversity of birds. There are over 578 species of wild birds including residents, winter visitors, passage migrants, summer visitors, occasional visitors and vagrants, recorded in Hong Kong. Over 60 of them are globally threatened or near-threatened species. About 100 resident species have been recorded breeding in the territory.

The Mai Po Marshes are listed as a Restricted Area under the Wild Animals Protection Ordinance and access is restricted to permit holders. This area comprises extensive mudflat, mangrove and gei wais, forming the richest wetland habitats for migratory birds in Hong Kong. The Marshes forms part of the 1 500-hectare Mai Po Inner Deep Bay Ramsar Site which has been listed as a Wetland of International Importance under the Ramsar Convention since 1995. The Ramsar Site also participates in the "East Asian-Australasian Flyway Site Network" for enhancing international communication and cooperation in the conservation of migratory waterbirds. About 400 species of birds, including a number of endangered species (e.g. Black-faced Spoonbill, Spoon-billed Sandpiper and Nordmann's Greenshank), have been recorded in the Ramsar Site.

Amphibians and Reptiles: Hong Kong has a total of 115 species of amphibians and reptiles. Among them, snake is the largest group, with 53 species. The largest snake is the locally protected Burmese Python, whose body length could reach 6 metres. On the other hand, the smallest members, blind snakes, are only 15 centimetres long. There are 21 native species of lizards, including the endemic Bogadek's Burrowing Lizard, which has been reported in only a few localities. There are 10 native species of chelonians in Hong Kong, among which the Green Turtle is of particular conservation interest in that it is the only species of sea turtles nesting locally. To minimise human disturbance and protect their nesting site, the beach at Sham Wan of Lamma Island was designated as a Restricted Area in 1999, and was subsequently expanded in April 2021 from the beach to the adjacent inlet. The restricted period was also extended from five months to seven months (April 1 to October 31) every year.

Hong Kong has 25 species of amphibians. Three of them, Hong Kong Cascade Frog, Hong Kong Newt and Romer's Tree Frog, have been listed as protected wild animals under the Wild Animals Protection Ordinance. A site in Ngong Ping of Lantau Island supports one of the largest populations of Romer's Tree Frog and has been listed as a Site of Special Scientific Interest (SSSI) in May 1999 to protect the habitat of this valuable frog.

Insects: Hong Kong has a rich insect fauna. There are 245 species of butterflies, including the eye-catching Swallowtails. With wings that span up to 30 centimetres, Atlas Moth is outstanding for its large size among the numerous species of moths found in Hong Kong. With 132 species recorded so far, the dragonfly fauna in Hong Kong is diverse, comprising the

globally threatened Chinese Tiger and *Anaciaeschna martini*, the latest additions to Hong Kong's dragonfly checklist.

Aquatic Animal: The marine fauna of Hong Kong is exceedingly diverse. Though primarily tropical, it is an admixture of tropical South China Sea and temperate Chinese forms because of the seasonal fluctuations of warm and cold water and monsoon weather conditions.

There are more than 1 000 marine fish species within Hong Kong waters, representing about 30% of marine fish diversity of the South China Sea. Gobies, wrasses, groupers, jacks and snappers are some of the most species-rich marine fish families.

Marine invertebrates are also abundant, ranging from corals, molluscs to crustaceans. There are 84 species of hard corals in Hong Kong. The richest coral communities prevail to the east and northeast of Hong Kong where the waters are both sheltered and free from the influence of Pearl River.

Chinese White Dolphins and Finless Porpoises are resident species and can be found year-round. All cetaceans are protected in Hong Kong under the Wild Animals Protection Ordinance.

There are 196 species of freshwater fish, of which about 70 primary freshwater species spend their entire lives in freshwater habitat. Of the primary freshwater fish, cyprinids are dominant. Other freshwater fish include the brackish species and marine vagrants.

Hong Kong Wetland Park: The Hong Kong Wetland Park aims to promote nature conservation and education, as well as nature-based tourism. The 61-hectare park comprises a 10 000-square meter visitor centre with interactive galleries showcasing the functions and values of wetlands and an outdoor wetland reserve with a wide range of habitats, including freshwater marshes, mangroves, woodlands, shrublands, reedbeds and mudflats, demonstrating the diversity of Hong Kong's wetland ecosystem. With spectacular displays in a delightful natural setting, the park offers a rewarding experience for visitors to discover the wonderful world of wetlands.

The park also serves as a hub of nature conservation education organising numerous activities for the general public, schools and tourists, such as guided tours, workshops, lectures and volunteers' programmes. Visitors can reach the park by taking the Light Rail at Tin Shui Wai MTR Station. The standard admission fee to the park is \$30. Concessionary tickets, including those for students, seniors (aged 65 or above) and people with disabilities, are also offered at \$15.