

# 連繫自然

#### BOND WITH NATURE

#### 探索香港生態之美 EXPLORING BEAUTY IN HONG KONG'S BIODIVERSITY

香港特別行政區政府

The Government of the Hong Kong Special Administrative Region









序 Foreword 此時此地 Here and Now

4

10







目錄

Contents







保育自然生境 Conserving Natural Habitats

22





生物多樣性熱點 A Biodiversity Hotspot

52

嶄露與盛開 Emergence and the Blooming Beauties

54

繁衍與延續 Propagation and the Continuous Cycles

74

遷徙與過冬 Migration and the Winter Wonderland

85



與大自然共存 Co-existing with Nature

92



邁向可持續發展的大灣區 Towards a Sustainable

Greater Bay Area

112

生物多樣性主流化 Biodiversity Mainstreaming

114

區域合作與交流 Regional Cooperation and Exchange

124

#### 序 Foreword



國家一向重視環境保護與經濟發展的協同關係,把生態文明建設作為國家永續發展的根本,推動綠色低碳發展,建設人與自然和諧共生的現代化,貫徹國家主席習近平所提出的「綠水青山就是金山銀山」的理念。而作為國家開放度最高、經濟活力最強的區域之一,粵港澳大灣區(大灣區)發展其中一個重要部分,就是推動生態文明建設。

自然保育和綠色發展正為香港和大灣區其他城市帶來無限機遇。大灣區享有地理條件優越的戰略性優點,三面環山、三江匯聚。粵港澳三地生態環境緊密相連,為推動建設天更藍、山更綠、水更清、環境更優美的美麗大灣區,大灣區城市正聯手編制《粵港澳大灣區生態環境保護規劃》(《規劃》),以指導大灣區當前和今後的生態環境保護。在此《規劃》下,粵港澳三地正全面深化生態環境保護的交流合作。

香港特別行政區位處大灣區南面沿岸,蘊含豐饒的生物多樣性和自然資產。香港多年來積極採取措施, 保護有高生態價值的生境和物種。在此基礎上,香港正根據《規劃》在生物多樣性、濕地網絡及海域生態 系統等各方面,和大灣區其他城市進行緊密合作,以共同打造生態防護屏障,建設森林生態屏障和海洋 生態防護帶。

貫徹上述生態保育的理念,我在《2021年施政報告》中提出的《北部都會區發展策略》,將以「城市與鄉郊結合、發展與保育並存」為目標;北部都會區是具規模的城市空間,將成為香港境內促進港深融合發展和連繫大灣區最重要的地區。北部都會區擁有豐富多樣的生態環境,香港特區政府將制訂及實施積極保育政策,通過政府逐步收回數百公頃私人擁有的濕地和魚塘,優化管理,加強保育濕地,為北部都會區以至大灣區創造環境容量,締造優質的生活環境。

此外,粵港澳三地正面臨氣候變化所帶來的共同挑戰。香港亦正積極把握低碳轉型的契機,繼續以創新的方針將可持續發展理念貫徹社會各範疇。除了致力爭取於2050年前實現碳中和的目標,亦會和大灣區 其他城市就減少碳排放及能源消耗,以及推動綠色生活方式加強合作,以積極應對氣候變化。

大灣區城市間聯繫密切,通過進一步深化合作,各城市能在不同方面互補優勢。我們慶幸有中央人民 政府堅定的支持,亦會積極配合國家的生態保育策略,展望與大灣區城市及社會各界攜手協作,以新 思維、新技術,應對不同生態環境課題,合力締造一個發展活力充沛、生活質素優良、與自然和諧共生 的國際一流灣區。

香港特別行政區 行政長官 Our country has all along attached great importance to the synergistic connection between environmental protection and economic development. Building upon President Xi Jinping's belief that "lucid waters and lush mountains are invaluable assets", the country sees ecological civilisation as the very foundation of sustainable development, promotes low-carbon development and pursues modernisation in which man and nature harmoniously co-exist. As one of the country's most open and economically vibrant regions, taking forward ecological civilisation has become one of the integral parts of the development of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA).

Nature conservation and green development have offered countless opportunities to Hong Kong and other cities of the GBA. Surrounded by mountains on three sides and converging three rivers, the GBA enjoys the strategic advantages of a favourable geographical location. Guangdong, Hong Kong and Macao have interconnected ecological assets and environments. In high hopes of making the GBA a place with bluer skies, greener mountains, clearer water and a better environment, the GBA cities are jointly formulating the Plan on Ecological and Environmental Protection in the Guangdong-Hong Kong-Macao Greater Bay Area (the Plan) to guide current and future environmental protection. Under this Plan, Guangdong, Hong Kong and Macao are fostering closer exchange and cooperation in the protection of ecological environment.

Located at the southern coast of the GBA, the Hong Kong Special Administrative Region (HKSAR) boasts a wealth of biodiversity and natural resources. Hong Kong has all along been proactively implementing measures to protect species and habitats of high ecological value throughout the years. Hong Kong is closely cooperating with other cities of the GBA in various aspects, including biodiversity, wetland network and marine ecosystem conservation according to the Plan, making concerted effort to establish ecological protection barriers, build forest protection barriers and enhance marine ecological protection zone.

In fulfilment of the nature conservation belief, the Northern Metropolis Development Strategy I announced in the 2021 Policy Address has adopted "Urban-Rural Integration and Co-existence of Development and Conservation" as an objective. The Northern Metropolis will serve as a large-scale urban space and the most important area facilitating our development integration with Shenzhen and connection with the GBA. The Northern Metropolis houses diverse habitats. The HKSAR Government will formulate and implement a proactive conservation policy through the gradual resumption of several hundred hectares of private wetlands and fish ponds by the Government for enhanced management and wetland conservation, creating environmental capacity and quality living space for both the Northern Metropolis and the GBA.

Meanwhile, Guangdong, Hong Kong and Macao are facing emerging challenges from climate change. Hong Kong is seizing the opportunity brought about by low-carbon transformation, and pressing on the mainstreaming of sustainable development into every aspect of society through an innovative approach. Besides striving to achieve carbon neutrality by 2050, Hong Kong is also deepening cooperation with other GBA cities on carbon reduction, energy saving and promoting green living, with a view to combatting climate change proactively.

Having inherited strong ties, cities in the GBA can further deepen cooperation and fully leverage complementary advantages. We are heartened to have the staunch and long-standing support of the Central People's Government, and we will act in concert with the national environmental protection strategies. We look forward to working closely with our GBA counterparts and various sectors in the society as a whole, responding to various ecological and environmental issues with new thinking and new technologies. We stand together to create a world-class bay area vibrant in development that co-exists harmoniously with nature, at the same time supporting an excellent quality of living.

#### **Carrie LAM**

Chief Executive Hong Kong Special Administrative Region

#### 序 Foreword



致力與自然環境共生,特區政府近年有序地制定及更新一系列環保藍圖。由2016年《生物多樣性策略及行動計劃》至2021年《香港資源循環藍圖2035》、《香港電動車普及化路線圖》、《香港清新空氣藍圖2035》和《香港氣候行動藍圖2050》,這些藍圖環環相扣,令此國際大都會更環保宜居,邁向於2050年前香港實現碳中和目標,同時配合粵港澳大灣區的生態文明建設。

香港的郊野公園展現生態之美及多樣性,廣受市民大眾以至世界各地旅客樂道樂行。近年,我們更把一些鄰近郊野公園的高生態價值地方,例如西貢的大浪西灣和北區的芬箕托及西流江的郊野公園「不包括的土地」納入郊野公園範圍,並籌劃成立毗鄰深圳梧桐山國家森林公園的紅花嶺郊野公園,整體會令香港郊野公園面積增添約500多公頃,總面積將擴大至約44800公頃。

海岸保育方面,特區政府近年已先後指定大小磨刀海岸公園、大嶼山西南海岸公園、擴展南丫島深灣限制地區及延長限制期,並正在設立南大嶼海岸公園及北大嶼海岸公園,受保護的總海域將增添近4500公頃,即將原本海岸保育範圍倍增有餘,總面積將擴大至約8500公頃。

在國際層面,位於香港東部的地質公園已被納入聯合國教科文組織世界地質公園名單,逾十年來甚受境內外遊人鍾愛。當中,民間主導的荔枝窩鄉郊復育項目,在2020年獲聯合國教科文組織授予「可持續發展特別貢獻獎」的殊榮。另外,2021年初,特區政府根據《瀕危野生動植物種國際貿易公約》將更多物種納入受管制名單;2021年底,亦完成逐步淘汰本地象牙貿易的計劃。

於連繫本地文化範疇,2018年中,特區政府新設鄉郊保育辦公室,並於2019年推出鄉郊保育資助計劃,支持復育偏遠鄉郊,當中優先處理及深化荔枝窩一帶的保育工作。而培養大眾於衣食住行的良好環保習慣,亦不可或缺,例如,特區政府推動「有衣食」惜食文化,亦就自身公務酬酢活動制定指引,採用具保育意識的菜單,剔除魚翅、髮菜及藍鰭吞拿魚等;同時,推廣低碳節能的家居生活以至低碳本地遊,並且呼籲大眾遠足時「自己垃圾自己帶走」,甚至參與清潔海岸,支持「山海不留痕」郊遊文化。

維繫自然生態以至邁向碳中和,人人有責。我鼓勵大家探索香港生態之美,並同行低碳環保,探索簡約 生活之樂,並保育自然生態。

香港特別行政區政府 環境局局長

黃錦星

The HKSAR Government has recently formulated and updated a series of environment blueprints to take forward living in harmony with nature. From the Biodiversity Strategy and Action Plan announced in 2016, to those published across 2021, including the Waste Blueprint for Hong Kong 2035, Hong Kong Roadmap on Popularisation of Electric Vehicles, Clean Air Plan for Hong Kong 2035 and Hong Kong's Climate Action Plan 2050, these blueprints dovetail to set our metropolis on a path to a cleaner, greener and more liveable future, towards realising carbon neutrality by 2050, and tying in with the building of ecological civilisation in the GBA.

Embodying natural beauty and a diversity of wildlife, country parks in Hong Kong hold special attractions for the local community and visitors from around the world. Recently, we have incorporated suitable sites that are adjacent to country parks and of high ecological value, such as enclaves in Tai Long Sai Wan at Sai Kung, Fan Kei Tok and Sai Lau Kong in the North, into country parks. We are also preparing to designate the proposed Robin's Nest Country Park that abuts the Wutong Mountain National Park in Shenzhen. As a result, country parks in Hong Kong will receive an additional 500 hectares of land, amounting to a total of 44 800 hectares.

As for marine conservation, the HKSAR Government has in recent years designated the Brothers Marine Park and Southwest Lantau Marine Park; expanded the restricted area at Sham Wan of Lamma Island and extended its restricted period; and is proceeding with the designation of the South Lantau Marine Park and North Lantau Marine Park. Hong Kong will have an additional 4 500 hectares of protected sea area upon the designation of the proposed marine parks, amounting to a vast 8 500 hectares that yields more than a twofold increase in marine conservation area.

At the international level, the geopark at the east of Hong Kong has been a member of the UNESCO Global Geoparks, drawing visitors across and beyond the city over the past decade. Notably, the community-led rural revitalisation project in Lai Chi Wo was awarded the "Special Recognition for Sustainable Development" by UNESCO in 2020. In early 2021, the HKSAR Government included more endangered species on the control list under the Convention on International Trade in Endangered Species of Wild Fauna and Flora and completed the phasing out of local ivory trade by the end of the same year.

With regard to connection to local culture, the HKSAR Government established the Countryside Conservation Office in mid-2018 and launched the Countryside Conservation Funding Scheme in 2019 to support the revitalisation of remote countryside, with enhancing conservation and revitalisation in the Lai Chi Wo area as a priority. Besides, the HKSAR Government has taken further actions to nurture a habit of environmental-friendly lifestyle in the community. The HKSAR Government has pledged to adopt conservation-conscious food consumption with no shark fin, black moss or bluefin tuna during official entertainment functions, promoted low-carbon and energy-saving household and local low-carbon travels, as well as encouraged the public to "Take Your Litter Home" during hiking, participate in coastal clean-ups and support a good culture of "Leave no Trace at Mountain and Sea".

All of us share the responsibility to sustain nature and achieve carbon neutrality. I hereby encourage everyone to explore the beauty in Hong Kong's biodiversity, live green, find joy in simple living and conserve the nature together.

#### **WONG Kam-sing**

Secretary for the Environment
The Government of the Hong Kong Special Administrative Region

#### 序 Foreword



大自然是我們重要的瑰寶和資產,健全的生態系統能調節氣候、淨化水質和達致養分循環,漁獲和作物 更支持著區內的漁農業。不論是日常所需,以至物質之外的文化生活,生物多樣性都為城市人帶來種種 益處,是締造宜居環境不可或缺的一環。

香港的地理位置優越,擁有特殊的地質和氣候,加上多年來妥善推行自然護理工作,讓這個幅員細小的城市享有極為豐富的生物多樣性。我們至今已錄得逾3 300種植物、超過560種鳥類、近250種蝴蝶、129種蜻蜓、55種陸棲哺乳動物、115種兩棲爬行動物、193種淡水魚、過百種珊瑚和約千種海魚。香港擁有數個國際重要生境,當中孕育了不少具科學價值和國家重點保護的動植物物種。

香港多年來積極採取自然保育措施,透過劃定保護區、執行相關法例、土地用途規劃及發展管制、推行自然保育管理協議計劃和保育行動計劃等,充分保護本地各種生境和物種。我們迄今已設立多個郊野公園和海岸公園,並將具重要生態價值的地點劃為保護區,以保護其生態系統和原址保育野生生物。我們亦會繼續進行指定郊野公園和海岸公園的工作,包括擬議的紅花嶺郊野公園、南大嶼海岸公園和北大嶼海岸公園等,加強保育香港的自然生態。在保護國際受威脅物種上,香港亦積極和嚴厲打擊涉及瀕危野生動植物的非法貿易。

《連繫·自然 — 探索香港生態之美》一書,以一系列引人入勝的相片展示香港旖旎的景致和豐富的生物多樣性,說明香港在生態保育和生物多樣性主流化兩方面,以及與大灣區城市合作的成果。保育生物多樣性需要社會各界和大眾支持,透過把保育生物多樣性納入規劃、設計和日常生活中,讓我們與大自然和諧共存。

本相片集輯錄多名本地年輕生態攝影師、本署和各政府部門員工的作品,以及不少香港生態與潛水攝影 比賽的得獎和入圍作品,全面呈現大自然的各種美態。本書得以付梓,有賴本署員工的努力,謹此向 他們致以衷心謝意。

香港特別行政區政府漁農自然護理署署長

梁肇輝博士

Nature is our important treasure and asset. A healthy ecosystem can regulate climate, purify water, achieve nutrient cycling and support our local agriculture and fishery industries with crops and fish catches. From daily essentials to cultural pursuits beyond material life, biodiversity benefits urban dwellers in all aspects and is crucial to building a liveable environment.

Hong Kong enjoys a favourable geographic position and is blessed with a unique geological and climatic setting. By virtue of proper and dedicated nature conservation over the years, we have nurtured exceptionally rich biodiversity for this city of humble size. To date, Hong Kong is home to more than 3 300 species of vascular plants, beyond 560 species of birds, nearly 250 species of butterflies, 129 species of dragonflies, 55 species of terrestrial mammals, 115 species of reptiles and amphibians, 193 species of freshwater fishes, along with over a hundred species of corals and about a thousand species of marine fishes. Hong Kong also supports several habitats of international importance, where numerous animals and plants under state priority conservation or of scientific interest flourish.

Hong Kong has been adopting nature conservation measures proactively, including the designation of protected areas, law enforcement, land use planning and development control, and implementation of the Nature Conservation Management Agreement Scheme and species action plans. At present, we have already established multiple country parks and marine parks, and designated ecologically important sites as protected areas, where we can protect the ecosystems therein and conserve the wildlife in-situ. To better conserve our nature and ecosystem in Hong Kong, we will continue to take forward designating country parks and marine parks, including the proposed Robin's Nest Country Park, South Lantau Marine Park and North Lantau Marine Park. Hong Kong has also been making robust efforts to protect globally threatened species by combatting illegal trade in endangered species of wild fauna and flora.

Bond with Nature: Exploring Beauty in Hong Kong's Biodiversity takes you on a breathtaking journey through photographs of Hong Kong's enchanting sceneries and rich biodiversity, tells the story of the city's work in nature conservation and biodiversity mainstreaming, and outlines the fruits of cooperation with cities in the GBA. With a vision to live in harmony with nature, biodiversity conservation hinges upon the support of different sectors and members of the community, and its integration into the city's planning, design, as well as our everyday lives.

Fully showcasing the beauty of our nature, in addition to the winning and shortlisted entries of local wildlife and underwater photography competitions, this photobook also features photographs from local young wildlife photographers, staff of the Agriculture, Fisheries and Conservation Department (AFCD) and other government departments. Its successful publication owes much to the concerted efforts of the staff of the AFCD. My sincere appreciation goes to each one of them.

#### Dr. LEUNG Siu-fai

Director of Agriculture, Fisheries and Conservation The Government of the Hong Kong Special Administrative Region



## 此時此地

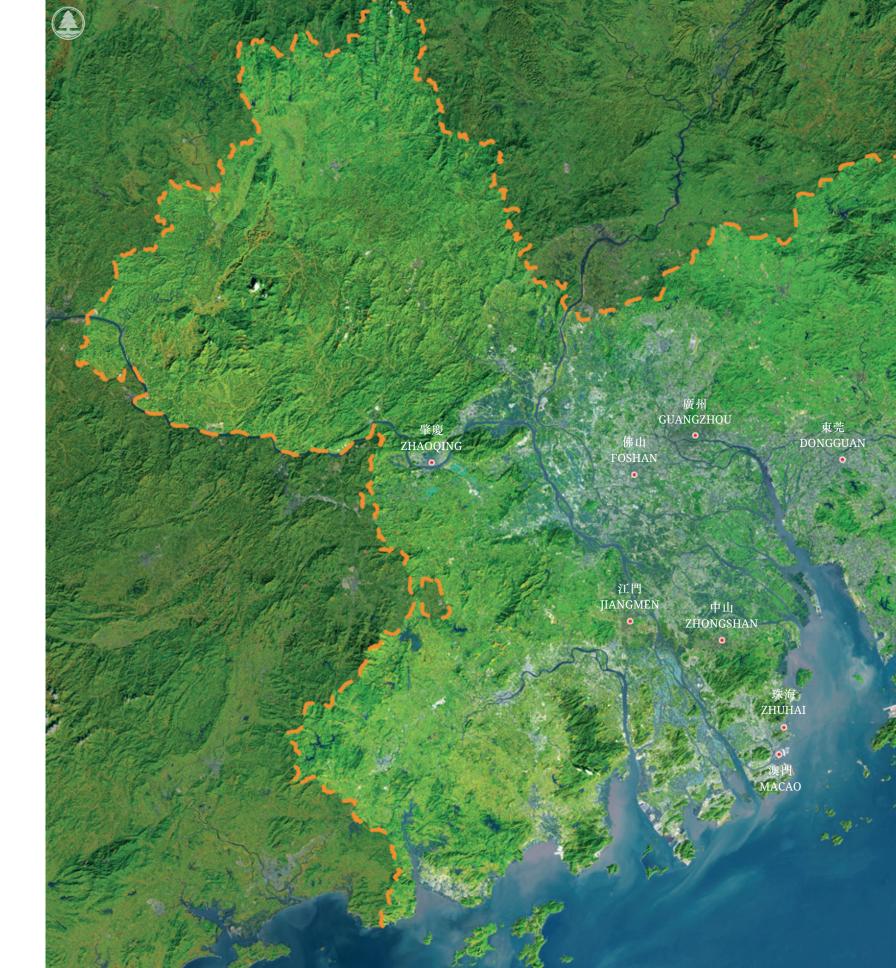
#### Here and Now

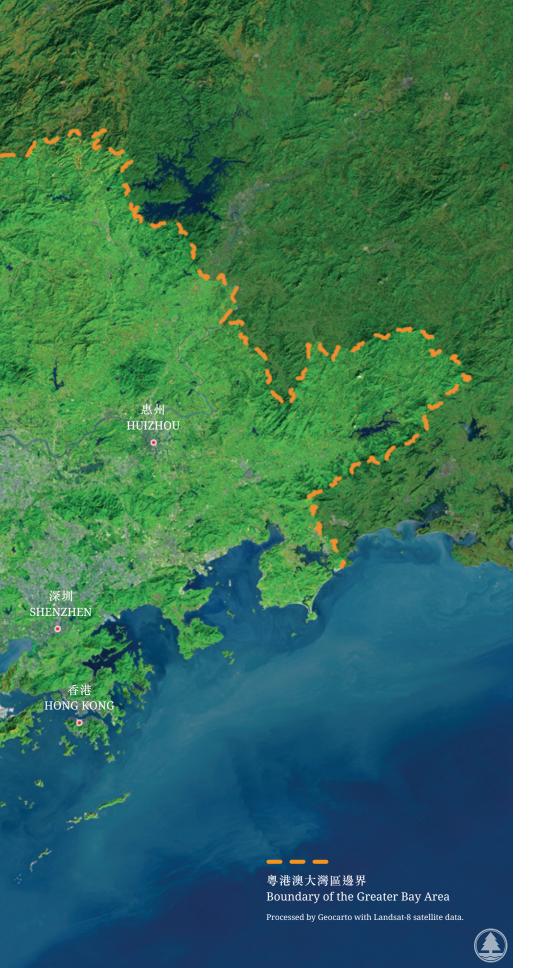
香港,一個活力多元的城市,繁華都會與青山綠水僅 相距咫尺,有賴社會各界在城市發展的過程中,致力 保育自然和積極建設生態文明。生機處處的山野與 海岸,既展現香港優美的風景,也為豐富國家以至 國際的生物多樣性作貢獻。

Hong Kong is a vibrant city with bustling urban centres and the countryside set in close proximity to each other. Throughout its urban development, the community has committedly preserved the city's natural assets and actively promoted ecological civilisation. Vibrant countryside and coasts exhibit the beautiful scenery of Hong Kong and contribute to national as well as international biodiversity.









香港和澳門兩個特別行政區與廣東省廣州、深圳、珠海、佛山、惠州、東莞、中山、江門及肇慶九市組成粵港澳大灣區(大灣區),總面積約5.6萬平方公里。大灣區各城市由山林、江河、濕地及海岸線等生態走廊相連,共同分享區內的自然環境和豐富的海洋資源。

The Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area) comprises two Special Administrative Regions, Hong Kong and Macao, and nine municipalities including Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing in Guangdong Province, covering a total area of around 56 000 km². Connected by ecological corridors of forests, rivers, wetlands and coastlines, cities in the Greater Bay Area share the wider natural environment and a bountiful supply of marine resources in the region.

香港山多平地少,陸地總面積約1110平方公里,海岸線綿長,人口多達700多萬。香港接近七成的面積為郊野綠地,植被覆蓋廣泛地區。城市依山而建,野生生物依城而棲。

The hilly terrain of Hong Kong spans approximately 1 110 km² of land area, rimmed by long and meandering coastlines. Almost 70% of the terrain is countryside with extensive vegetation cover. Residing with a population of over seven million, urban areas have been laying between hills and knolls, and wildlife thriving close to the city.



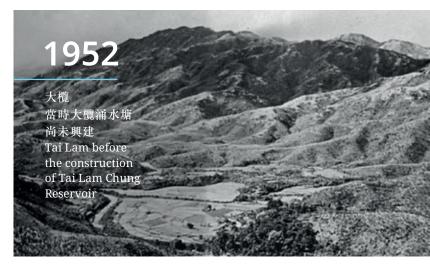


由於過往的戰爭及人為活動,香港的原生樹林受到嚴重破壞。漁農自然護理署(漁護署)早期為儘快增加林地覆蓋率、防止水土流失和改善景觀,於郊野公園主要種植生命力強且生長迅速的先鋒樹種。自1980年起,植林工作逐漸增加種植原生樹苗的比例,從而豐富植林區的物種組合,提高林地的生態價值和生物多樣性。

Native forests of Hong Kong were largely destroyed by wars and human activities in the past. During the early years, the Agriculture, Fisheries and Conservation Department (AFCD) had planted mostly hardy and fast-growing pioneer tree species in the country parks to expedite the establishment of vegetation cover, prevent soil erosion and improve the landscape. From the 1980s and onwards, a higher proportion of native tree seedlings has been adopted gradually in the afforestation programme, aiming to enrich the species composition and enhance the ecological value and biodiversity of local woodlands.

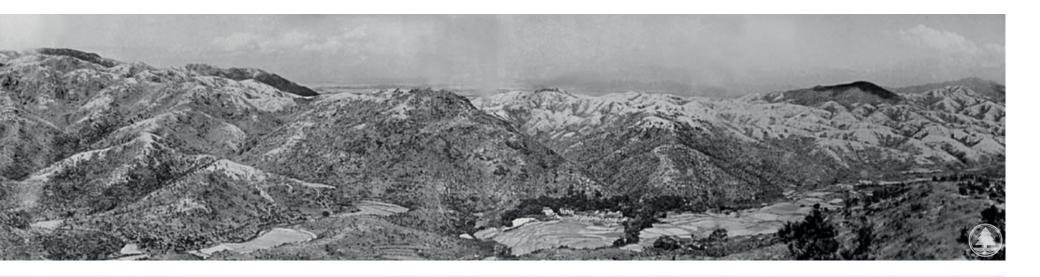


年青人參與早期的植樹活動。 Young people taking part in early tree planting activities.







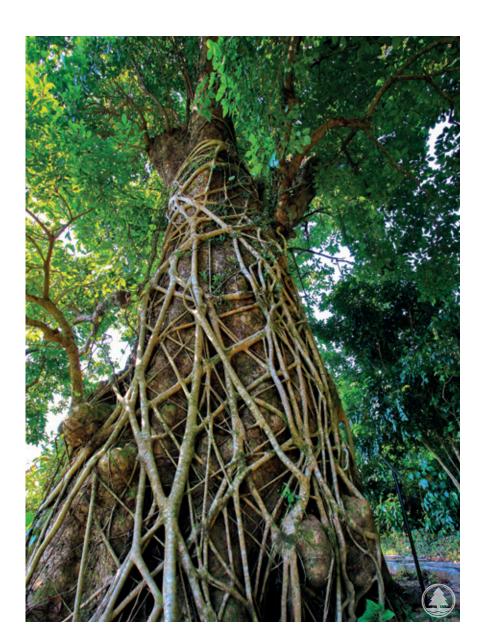












風水林是華南地區鄉村的特色,體現了人與自然和諧並存的微妙關係。 村民多年來相信樹林會為鄉村帶來好「風水」,因而對樹林加以保護。 由於得到前人悉心保留,風水林依舊蔥蘢如昔,處處生機。風水林展示 了香港原生低海拔闊葉林的面貌,當中保存的物種為附近的生境提供 自然演替及更新的物種來源,對維持本地生物多樣性意義重大。

Fung shui wood is a scenery unique to rural southern China that embodies the delicate and harmonious co-existence between human and nature. Villagers always believe that these forests can bring good fung shui and fortune to the rural communities and have given them great care and protection through generations. As the thriving remnants of Hong Kong's native lowland evergreen broad-leaved forests, these fung shui woods remain lush and full of life. They have provided the sources of natural succession and recruitment for adjoining habitats, which contributed significantly to local biodiversity conservation.

開始劃定郊野公園和特別地區,以保護大自然及為市民提供郊野康樂和戶外教育設施。

Designation of country parks and special areas for nature conservation, countryside recreation and outdoor education.



1977 郊野公園和特別地區 Country parks and special areas

以自然護理、教育、科研等為目的,開始劃定海岸公園及海岸保護區。 Designation of marine parks and marine reserve for the purposes of nature conservation, education, scientific studies, etc.



1996 海岸公園及海岸保護區 Marine parks and marine reserve

#### 重要里程碑 KEY MILESTONES

1995 拉姆薩爾濕地 Ramsar Site



米埔及內后海灣約15平方公里的濕地被列為拉姆薩爾濕地。 Designation of approximately 15 km² of wetlands in the Mai Po and Inner Deep Bay region as a Ramsar Site.

2004 新自然保育政策 New Nature Conservation Policy



公布新自然保育政策,旨在顧及社會及經濟 的考慮,以可持續方式規管、保護和管理對 維護香港生物多樣性至為重要的天然資源。

Announcement of the New Nature Conservation Policy. Social and economic considerations were incorporated to regulate, protect and manage key natural resources essential to Hong Kong's biodiversity in a sustainable manner.

香港濕地公園開幕,提供集自然護理、 教育及旅遊用途於一身的世界級景點。 Opening of the Hong Kong Wetland Park, a world-class facility combining nature conservation, education and tourism.



2006 香港濕地公園 Hong Kong Wetland Park

公布香港首份城市級的《生物多樣性策略及行動計劃》,列出保育生物多樣性及支持可持續發展的策略及行動。

Publication of Hong Kong's first city-level Biodiversity Strategy and Action Plan that details strategies and action plans for conserving biodiversity and supporting sustainable development.



2016 《生物多樣性策略及行動計劃》 Biodiversity Strategy and Action Plan

公布《北部都會區發展策略》,制訂政策積極保育 香港的濕地系統。

Announcement of the Northern Metropolis Development Strategy, formulating policy to proactively conserve Hong Kong's wetland system.



2021 《北部都會區發展策略》 Northern Metropolis Development Strategy

2009 中國國家地質公園 National Geopark of China



香港地質公園成為中國國家地質公園,並在2011年獲接納加入世界地質公園網絡,2015年更名為「香港聯合國教科文組織世界地質公園」。 The Hong Kong Geopark was designated as a National Geopark of China. It became a member of the Global Geoparks Network in 2011. It was renamed as the Hong Kong UNESCO Global Geopark in 2015.

2018 鄉郊保育辦公室 Countryside Conservation Office



成立鄉郊保育辦公室,統籌促進偏遠鄉郊可持續發展的項目。 The Countryside Conservation Office was established to coordinate conservation projects that promote sustainable development of remote countryside.







### 保育自然生境

#### **Conserving Natural Habitats**

香港地方雖小,但自然環境得天獨厚。獨特的氣候、 地理與水文條件塑造了紛繁多姿的海陸生境,孕育豐富 的生物群落。

在迅速發展的同時,香港約四分之三的土地仍然保留 自然面貌,並將其中具重要生態價值的生境劃為保 護區,全面保育其生態系統和野生生物。

Blessed with exceptional natural endowments, Hong Kong is more capacious than its small size suggests. An interplay of unique climatic, geographic and hydrographic conditions has shaped a multitude of diverse habitats and nurtured an impressive range of wildlife communities.

While other parts of the city rapidly develop, three-quarters of the land in Hong Kong remain as tranquil countryside. In particular, ecologically important habitats are designated as protected areas to provide comprehensive protection to the ecosystem and wildlife therein.







香港的植被主要分為樹林、灌叢和草地。儘管在昔日的人文活動下,大部分原生樹林經已不復存在,但經過多年的植林和自然演替,樹林現時佔全港

土地約四分之一。

香港至2021年已劃定24個郊野公園及22個特別地區,佔香港約四成土地,讓自然生態環境、地質地貌,以及野生動植物的棲息地受到法例保護。郊野公園內亦設有不同設施,例如遠足徑、自然教育徑等,為市民提供自然教育和戶外康樂場地。

The major types of vegetation in Hong Kong are woodland, shrubland and grassland. Due to human activities in the past, Hong Kong has lost most of its native forests. Yet, with natural succession and afforestation over the decades, woodland habitat now accounts for one-fourth of Hong Kong's total land area.

As of 2021, there are 24 country parks and 22 special areas designated in Hong Kong, covering a remarkable 40% of the land with legal framework to protect the local natural environment, geological features and wildlife habitats. The country parks also encompass multiple facilities such as hiking trails and nature trails for public education and outdoor recreation.

北大嶼郊野公園 — 黃龍坑郊遊徑 Wong Lung Hang Country Trail, Lantau North Country Park





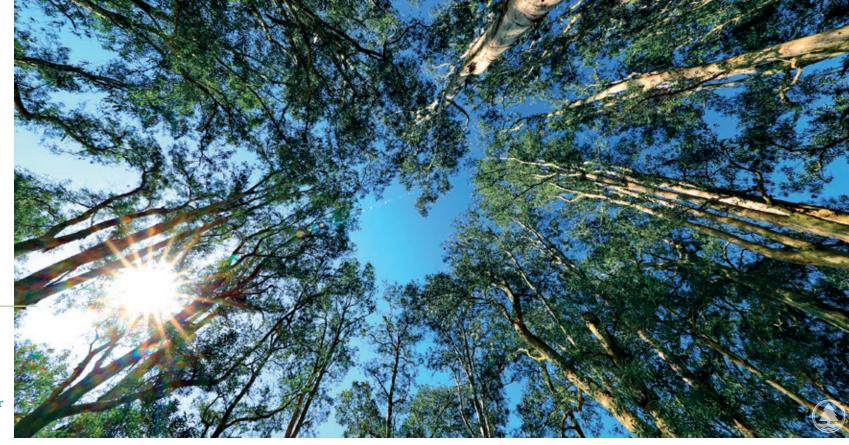
太平山 Victoria Peak

郊野公園早期主要種植適應力強和生長迅速的外來先鋒樹種,以防止水土流失及增加林地覆蓋。然而,部分植林區逐漸呈現老化、壞死等問題,生長空間不足亦有礙原生樹種的自然更替。 漁護署自2009年起推行「郊野公園植林優化計劃」,逐步以原生品種的樹苗取代老化的外來樹木,並進行除草、施肥及疏枝等 護理工作。成熟的原生樹種能為本地的野生動物提供果實、花蜜 等資源和棲息地,提升植林區的生物多樣性及可持續性。

In the early years, highly adaptive and fast-growing exotic pioneer trees were planted to prevent soil erosion and restore vegetation cover. With time, existing plantations face problems like ageing and withering, and crowding often discourages the natural regeneration of native plants. Since 2009, the AFCD has been conducting the Country Park Plantation Enrichment Programme to gradually replace ageing exotic trees with native tree seedlings. Complemented by post-planting maintenance like weeding, fertilising, and pruning, mature native trees will be able to provide favourable fruit, nectar and shelter to local wildlife and enhance the biodiversity and sustainability of plantations within country parks.

南大嶼山郊野公園的南山植林優化地點 Plantation Enrichment Programme Site at Nam Shan, Lantau South Country Park





白千層屬香港早期種植的外來先鋒樹種之一。 Paper-bark Tree (Melaleuca cajuputi subsp. cumingiana) is one of the exotic pioneer trees planted in the early years.

昂平高原長草覆地,遠處的大金鐘高聳入雲。 The grassy Ngong Ping Plateau with Pyramid Hill soaring in the distance.





大帽山是香港巍峨地形的主軸,草坡間不時雲霧縈繞,若浮若沉。 Rising above other peaks and ridges in Hong Kong, the grassy uplands of Tai Mo Shan often linger amidst ribbons of clouds.

灌叢和草地是香港常見的山坡植被。在沒有干擾的情況下,草地一般需要十年時間演替成灌木林,再經三、四十年才能發展成次生林。山火無疑會阻礙林地植被演替,漁護署因此致力宣傳和教育市民防止山火的重要性,並在多個郊野公園內設置防火帶、瞭望台、儲水缸及其他山火管理設施。在乾旱季節亦會安排山火隊當值,於山火發生時迅速應變撲滅山火。這些預防措施旨在減少山火對郊野環境及植被的破壞,從而保護野生動物的棲所。

Shrubland and grassland are typically found on the hillside of Hong Kong. Without any disturbance, it generally takes ten years for grassland to develop into shrubland and grow subsequently to secondary woodland in another three to four decades. Yet, hill fire will undoubtedly hinder such process of natural succession. The AFCD has actively promoted the importance of hill fire prevention to the community through publicity and education programmes. Firebreaks, fire lookouts, water tanks and other fire management facilities are established in the country parks to prevent the spread of hill fires. During the dry season, the AFCD also deploys fire crews to stand by at country parks to promptly extinguish any hill fire. These preventive measures can minimise the damage to the countryside and vegetation, hence protecting the habitats for local wildlife.

新娘潭一泓澄澈,瀑布層層流瀉。 Silky cascades at Bride's Pool plummeting into serene and crystal clear pools.







Hong Kong abounds with diverse wetlands, be they natural or engineered, flowing or stagnant, freshwater or saltwater, they all host remarkable biodiversity. In the form of natural streams and rivers, the waters roll across hills, valleys, villages and paddy fields. Some streams plunge into precipitous rocks and form waterfalls, and some converge into urban waterways, supporting distinct aquatic and riparian communities. Most catchment areas in Hong Kong are situated within the country parks and regulated by law to safeguard our valuable freshwater ecosystems and resources from pollution.

及資源因而獲得保護,免受污染影響。

香港的濕地多樣,既有天然也有人造,既有 流動也有靜止,鹹淡水交匯其中,蘊含極其豐 富的生物多樣性。香港的天然河溪處處,穿越 無數山巒深谷和村落田疇。溪水沿坡流淌, 瀉落峭壁化作白練瀑布,也會匯入潺湲的市區 河道,分別孕育出截然不同的水生和河岸生物 群落。現時大部分集水區均已納入郊野公園 範圍,同時受法例規管,本地珍貴的淡水生態



蘆葦直立中空,是眾多鳥類和昆蟲的棲所。 The hollow but erected Common Reedgrass (*Phragmites australis*) makes favourable habitats for birds and insects.







鹽田仔的泥灘 Mudflat at Yim Tin Tsai

低地濕地是世界上最具生產力的生境之一,除了為人類帶來 裨益,眾多生物也賴以為生。茂密的蘆葦叢能隔濾和吸收 污染物,在其根部棲息的微生物可以加速有害物分解,因此 能淨化和改善水質。泥灘蘊含的豐富有機物更為各種無脊椎 動物提供食物,繼而吸引涉禽及其他水鳥前來覓食。

Lowland wetlands are among the most productive habitats in the world. They bring benefits to human beings and support the survival of many life forms. Dense reed beds can purify and improve water quality by filtering and removing pollutants. Microorganisms that inhabit reed roots also make significant contributions to accelerating the decomposition of harmful substances. Mudflats are likewise, rich stores of organic matters and they provide food to myriads of invertebrates that in turn attract foraging waders and other waterbirds.

米埔內后海灣拉姆薩爾濕地位於香港新界西北, 是中國第七片國際重要濕地,主要由泥灘、 基圍、魚塘,以及全港最大片的紅樹林組成。 每年冬季,這片濕地均約有5-8萬隻水鳥棲息, 當中包括黑臉琵鷺、勺嘴鷸和小青腳鷸等全球受 威脅物種。

「拉姆薩爾濕地管理計劃」按照生境類型、生態價值和現有土地用途,將這片濕地劃分區域管理。 核心區和生物多樣性區以保育為主,並限制 進出:善用區及私人土地區內,則鼓勵從事與 生態共融的可持續水產養殖。 Situated at the northwest New Territories, the Mai Po Inner Deep Bay Ramsar Site is the seventh Wetland of International Importance in China. The Ramsar Site comprises mudflats, *gei wais*, fishponds and the largest mangrove stand in Hong Kong. This wetland regularly supports 50 000 to 80 000 waterbirds every winter. Among them are various globally threatened species such as Black-faced Spoonbill (*Platalea minor*), Spoonbilled Sandpiper (*Calidris pygmaea*) and Nordmann's Greenshank (*Tringa guttifer*).

The Ramsar Site is strategically zoned and managed based on habitat type, ecological value and existing land use under the Ramsar Site Management Plan. The Core Zone and Biodiversity Management Zone are dedicated to conservation with restricted access, whereas the Wise Use Zone and Private Land Zone encourage ecologically sustainable aquaculture.









漁護署自2005年起推行自然保育管理協議計劃(管理計劃),透過非牟利機構與鄉郊社區合作,妥善管理須優先加強保育地點及郊野公園內的私人土地。后海灣地區的魚塘和塱原及河上鄉農地分別在當地養魚戶和農夫的協作下,先後實施多項惠及水鳥和濕地動物的措施,如建立多元化的水田生境、季節性淹水和降低魚塘水位等,保持人和大自然的平衡,各取所需。

Since 2005, the Nature Conservation Management Agreement Scheme (MA Scheme) implemented by the AFCD enables non-profit making organisations to work with rural communities for managing private land in Priority Sites for Enhanced Conservation and country parks. Supported by local fishpond operators of the Deep Bay area and farmers in Long Valley and Ho Sheung Heung, measures like paddy fields creation, seasonal flooding and draining down of fishponds are carried out to support the waterbirds and wetland fauna. The schemes and measures provide the needs for both the wildlife and locals, while promoting the balance between human and nature.

塱原位處「內后海灣及深圳河集水區」 的國際「重點鳥區」內。 Long Valley lies within the international Important Bird Area of the Inner Deep Bay and Shenzhen River catchment area.



自管理計劃實施後,棲息於這些魚塘及農地的 鳥類物種和數量均有明顯增長。除了留鳥,這 些濕地更吸引不少遷徙鳥如全球受威脅的黃胸 鵐等。供漁農作業的濕地能透過有利生態及可 持續發展的方式運作,成為本地及區域性野生 生物的棲息地,與天然濕地相輔相成。 The MA Scheme has brought about substantial increases in the diversity and abundance of birds inhabiting the fishponds and agricultural lands. These sites have attracted not only resident birds, but also migrant species such as the globally threatened Yellow-breasted Bunting (*Emberiza aureola*). Operated in an ecologically friendly and sustainable manner, wetlands with aquaculture and farming activities can complement natural wetlands as habitats for local and regional wildlife.



參與計劃的漁民會在收取漁獲後,把魚塘水位降低,留下經濟價值較低 的魚、蝦供水鳥覓食。

After harvesting, fishermen under the scheme will conduct drain-down of fishponds, leaving behind small fish and shrimp of less economic value for waterbirds to feed on.

38

東涌職頭的紅樹林和海草床 Mangrove stand and seagrass bed in San Tau, Tung Chung



海草是唯一能完全在海中生長的開花植物。 Seagrass is the only flowering plant that can live in all-time submerged in marine environments.



荔枝窩的紅樹林 Mangrove stand in Lai Chi Wo

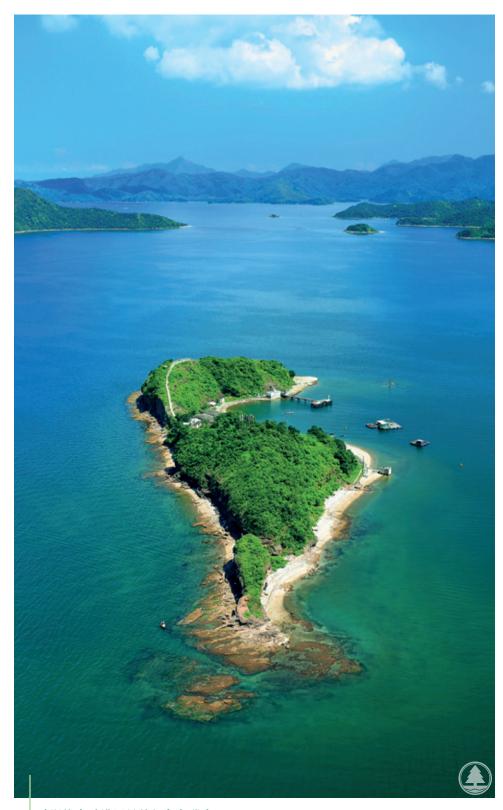




紅樹林主要生長在熱帶和亞熱帶的潮間帶河口,是沿岸食物網不可或缺的一環。常毗鄰紅樹林的海草群落,同樣為不少蟹、螺及魚類等生物提供食物及棲息地。香港面積廣闊或生態價值高的紅樹林和海草床均已納入保護區作重點保護,以減少受沿岸發展影響。

As an indispensable part of the coastal food web, mangroves can be found at intertidal estuaries of the tropics and subtropics. Neighbouring the mangroves, seagrass communities further provide shelter, feeding ground and food source for organisms like crab, snail and fish. Local mangrove stands and seagrass beds that are ecologically significant or of considerable size have been secured in protected areas, to minimise the impacts from coastal development.

荔枝窩海岸擁有香港大部分真紅樹物種。 The Lai Chi Wo coast hosts most of Hong Kong's true mangrove species.



鴨洲擁有香港罕見的紅色角礫岩。 Ap Chau is one of the few places in Hong Kong where ochre breccia can be found.









東平洲 — 海蝕平台 Wave-cut platform of Tung Ping Chau



海浪沖蝕塑造了如今所見的海岸線,曲折有致;受風化侵蝕的岩石更見奇偉,傲然屹立。

西貢一帶的六角形岩柱群成因 特殊,岩石結構和化學成分獨特, 蔚為世界級奇觀。新界東北的沉積 岩則記錄了香港四億年的地質歷 史。縱使潮間帶時常受到風浪和 潮汐影響,但岩岸仍為眾多腹足類 和其他軟體動物提供重要的棲息 之所。 The restless wave action has eroded the coastlines into the endless intricacy seen today. Weathered rocks come in different spectacular forms and shapes, where artworks by nature never fail to intrigue.

The staggered hexagonal rock columns at Sai Kung are globally rare geo-wonders, as they differ from columns found elsewhere in rock texture and chemical composition. To the northeast New Territories, sedimentary rocks unveil Hong Kong's geological history over the past 400 million years. Despite the harsh and ever-changing conditions created by onshore wind and tides, intertidal rocky shores remain as critical habitats for coastal organisms like gastropods and molluscs.



赤洲 — 紅色的礫岩和砂岩 Rust-coloured conglomerate and sandstone on Port Island

鴨洲 — 海蝕拱 Sea arch at Ap Chau





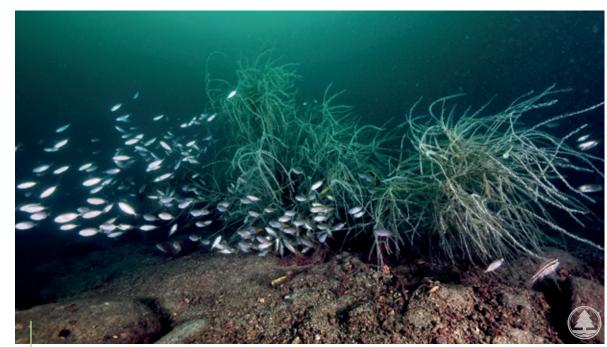


石珊瑚群落 Hard coral communities



香港三面環海,海域面積約1650平方公里。香港的水文環境獨特,西面毗鄰珠江河口,得到淡水徑流補給;東臨遼闊的南中國海,受冬夏季海流潤澤。香港沿岸還有不同的地質結構和底土層,分別締造多種海岸和海洋生境,孕育無數熱帶和亞熱帶生物。

With a total sea area of 1 650 km², Hong Kong is surrounded by waters on three sides and has a distinctive hydrological environment. Neighbouring the Pearl River Estuary, Hong Kong receives freshwater runoff in the west, while the vast South China Sea brings nourishing seasonal currents to the eastern waters. The unique variation of geological structures and substrates along the coast have shaped a mix of different coastal and marine habitats, supporting a rich assemblage of tropical and temperate species.







三鬚 Pointed Goatfish (Parupeneus biaculeatus)

馬尾藻可長至二至三米高,形成茂密的海藻床。 Dense beds of *Sargassum* can grow up to 2 or 3 metres in length.





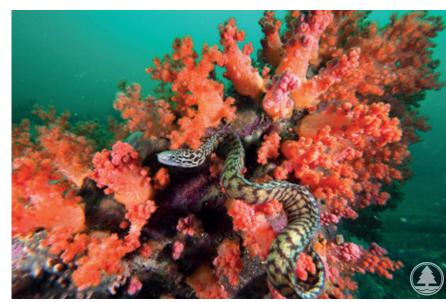
冬末至春天是香港海藻多樣性最高,群落最茂盛的季節。像馬尾藻等大型褐藻會形成龐大的冠層, 沿岸向四方鋪展,為魚類和無脊椎動物提供庇護和 育幼場所。海藻同時是海膽和甲殼類等眾多生物的 食物,是沿岸食物網和養分循環的重要基石。

Hong Kong often records the highest diversity and largest assemblage of seaweeds (macroalgae) between late winter and spring. Large brown algae like *Sargassum* can form extensive, forest-like canopies, which provide shelters and nursery grounds for marine organisms. Seaweeds also serve as a food source for an array of grazers like sea urchins and crustaceans, making them one of the essential building blocks for coastal food webs and nutrient cycles.

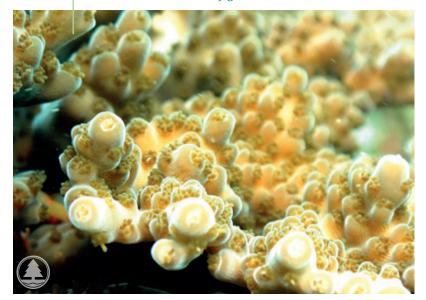


香港位處熱帶北緣,縱使冬天水溫較低,仍有達80多種造礁珊瑚 棲息。這些石珊瑚大多依附在岩石和石床上,形成錯綜複雜的珊瑚 群落和微生境,為無數海洋生物提供棲息、繁衍和藏身之所。

在香港的珊瑚群落中,以東面水域的東平洲海岸公園和海下灣海岸公園較為廣闊和豐富;西南面水域也有多種八放珊瑚和非造礁珊瑚,如軟珊瑚、柳珊瑚、黑珊瑚和海筆等棲息。



造礁珊瑚的碳酸鈣骨骼會隨著生長而積聚層疊。 Reef-building corals build up layers of calcium carbonate skeleton as they grow.



Hong Kong lies at the northern margin of the tropics. Despite the relatively cool water during winter, more than 80 species of reef-building corals are found inhabiting our local waters. Most of these hard corals attach themselves onto boulders and bedrocks, forming intricate coral communities and microhabitats where countless organisms live, flourish and seek shelter.

Among the coral communities in Hong Kong, those in the eastern waters like Tung Ping Chau Marine Park and Hoi Ha Wan Marine Park are more extensive and abundant. South-western waters are also home to numerous octocorals and non-reef-building corals such as soft corals, gorgonians, black corals and sea pens.



柱角孔珊瑚 Goniopora columna





馬尾藻床 Beds of Sargassum





霜鹿角珊瑚 Acropora pruinosa

香港已記錄的海魚種類佔南中國海約三成。 Marine fish in Hong Kong accounts for around 30% of the total species recorded in the South China Sea.



香港現時共有六個海岸公園和一個海岸保護區,以保育海洋生物和管理沿岸重要的生態系統。海岸公園以分區計劃管理區內各種保育、教育、康樂和科研等活動。海岸保護區範圍雖小,但存護價值甚高,在嚴格管制下只容許進行許可的教育活動和科學研究。

除了執法、巡邏和規劃管理等工作外,漁護 署會定期監察海岸公園和海岸保護區的生態 資源、水質和環境。

Hong Kong has designated six marine parks and one marine reserve to conserve marine organisms and manage ecologically important coastal ecosystems. Marine parks are managed under a multiple-use zoning scheme for conservation, education, recreation and scientific studies. Marine reserve covers a smaller area but commands very significant conservation value, where only authorised education and scientific research are allowed under stringent control.

In addition to law enforcement, patrolling, management and planning, the AFCD also regularly monitors the conditions of ecological resources, water quality and physical environments of the marine parks and marine reserve.





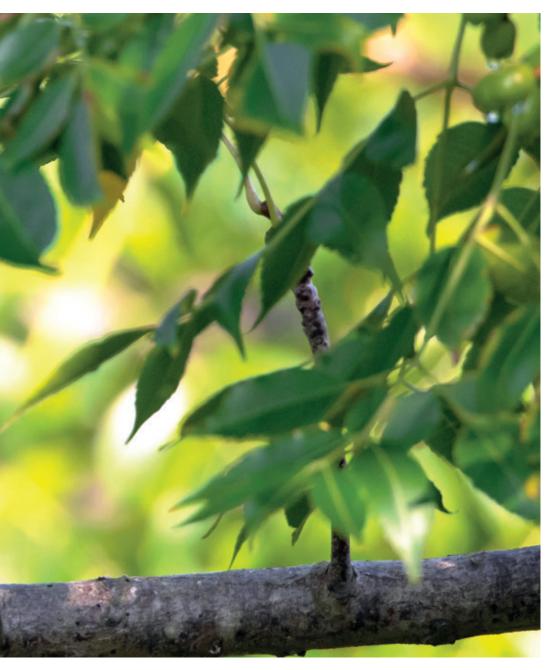
網絲蛺蝶 Common Mapwing (Cyrestis thyodamas)



帝王蝦 Emperor Shrimp (Zenopontonia rex)



領鵂鶹 Collared Owlet (Taenioptynx brodiei)





獼猴 Rhesus Macague (Macaca mulatta)



# 生物多樣性熱點

#### A Biodiversity Hotspot

香港屬亞熱帶氣候,夏季溫暖潮濕,冬季清涼乾燥,加上地勢起伏,各種生境相依,使本地生物物種紛呈。雖是彈丸之地,但香港位處「東亞 — 澳大利西亞遷飛區」的中央,總共錄得超過560種鳥類,佔全中國鳥類物種逾三分之一。此外還錄得約3300種維管束植物、過百種兩棲爬行動物和近250種蝴蝶。香港水域亦匯合了珠江徑流、湧升流和多種海流,孕育過百種珊瑚和約千種海魚。

Hong Kong has a subtropical climate with warm, humid summers and cool, dry winters. This climatic backdrop, coupled with the undulating terrain and interlocking habitats, support a kaleidoscope of wild plants and animals. Hong Kong may be insignificant in size, but sitting at the centre of the East Asian-Australasian Flyway, the city offers a wide range of habitats that has attracted over 560 species of birds, accounting for one-third of the total recorded in China. Hong Kong is also home to around 3 300 species of vascular plants, over a hundred species of herpetofauna and nearly 250 species of butterflies. Besides, the Pearl River runoff, upwelling and coastal currents converge along Hong Kong waters, where over a hundred species of corals and a thousand species of marine fishes flourish.

### 嶄露與盛開

## Emergence and the Blooming Beauties

香港的四季景致各異,春夏花繁葉茂,秋冬碩果 纍纍。香港的植物多樣性極為豐富,形態爭奇鬥 豔,習性更是變化多端。在芸芸植物中,有的像 華南長筒蕨和棱果花,具重要科學研究價值;也 有以香港命名的物種,如香港鳳仙和香港水玉杯。

From the unrolling of spring flower carpets to the bursts of fruit and nut on fiery autumn shades, Hong Kong is blessed with spectacular seasonal displays across the year. Hong Kong's plants are rich in diversity, with each asserting themselves through their eccentric glamour and complex habits. Of the remarkably kaleidoscopic flora in Hong Kong, some plants like Siamense Selenodesmium (Selenodesmium siamense) and South China Barthea (Barthea barthei) are of significant scientific research value, and some are named after the city, such as Hong Kong Balsam (Impatiens hongkongensis) and the endemic Hong Kong Thismia (Thismia hongkongensis).



香港水玉杯 Hong Kong Thismia (Thismia hongkongensis)

#### 華南長筒蕨 Siamense Selenodesmium (Selenodesmium siamense)





棱果花是整個棱果花屬中僅有的物種並為中國特有。 South China Barthea (Barthea barthei) is the only member of its genus and is endemic to China.



香港鳳仙 Hong Kong Balsam (Impatiens hongkongensis)

吊鐘花 Chinese New Year Flower (Enkianthus quinqueflorus)







桔梗 Balloon Flower (Platycodon grandiflorus)







香港茶 Hong Kong Camellia (Camellia hongkongensis)

香港有多個保護重要植物生境的具特殊科學價值地點, 大部分稀有及瀕危植物均生長於郊野公園等保護區內,受法 例保護,其生境亦得到管理。此外,城門標本林種植了約 300種本地或華南地區的原生植物,對遷地保育和教育起重 要作用,當中不少更是本土稀有和瀕危的物種。漁護署也會 人工繁殖部分植物,並重新種植幼苗及建立野外種群。

Several Sites of Special Scientific Interest in Hong Kong are designated to protect habitats with floristic importance. Together with the country parks, these protected areas have been strongholds of locally rare and endangered plants, where they are under statutory protection and habitat management. Besides, the Shing Mun Arboretum hosts a collection of approximately 300 plant species indigenous to Hong Kong or South China. The Arboretum, which preserves specimens of Hong Kong's rare and endangered plants *ex-situ*, plays a significant role in local flora conservation and education. The AFCD also conserves selected plants by artificial propagation and replants the seedlings to the wild for establishing new populations.

香港安蘭 Purple Bulb Orchid (Ania hongkongensis)





香港共有百多種蘭科植物,全年各有不同物種開花,當中既有一些生於濕漉的 茂林溪瀑,也有長在開揚的草叢崖壁。香港的地生蘭花種類繁多,形態和顏色 各有不同;附生及岩生蘭分別長於枝椏間和岩石上;無法進行光合作用的腐生 蘭則潛蹤隱跡,只在花期才會冒出泥土。

More than a hundred species of native orchids take turns to flower exquisitely throughout the year. Some hide deep in sheltered, damp woods and streams, while some tower above open upland grasslands and craggy slopes. Terrestrial orchids in Hong Kong come in a rainbow of wildly divergent forms and colours. Epiphytic and lithophytic species attach themselves onto branches and rocks respectively, whereas saprophytic orchids that are incapable of photosynthesis often stay out of sight and emerge only when they bloom.



香港金線蘭 Hong Kong Jewel Orchid (Anoectochilus yungianus)

流蘇貝母蘭 Brown Rock-orchid (Coelogyne fimbriata)



紫紋兜蘭 Hong Kong Lady's Slipper Orchid (Paphiopedilum purpuratum)





無葉美冠蘭屬本地少數的腐生蘭之一。 Hong Kong Eulophia *(Eulophia zollingeri)* is one of the few saprophytic orchids in Hong Kong.

嶄露與盛開 Emergence and the Blooming Beauties



除了較常見的野豬和獼猴外,入夜後,不少藏蹤躡跡的野生哺乳類動物也開始紛紛露臉。香港的哺乳類動物大多屬夜行性,當中包括精通攀樹和游泳的豹貓,以及縱橫樹枝的採果能手一果子狸。

Apart from the common Eurasian Wild Pig (Sus scrofa) and Rhesus Macaque (Macaca mulatta), as night falls across, enigmatic mammals that are rarely seen become active rustling in the woods. Most of the wild mammals in Hong Kong are nocturnal, among them are Leopard Cat (Prionailurus bengalensis), the agile tree climber and swimmer, and Masked Palm Civet (Paguma larvata) that is adapted to a life in the forest canopy and feeds on fruits.



赤麂生性膽小,受驚擾後會迅速逃匿。 The timid Red Muntjac (Muntiacus vaginalis) scuttles away quickly when startled.



豹貓耳後長有大白斑,日間常躲在石縫或樹洞中休息。 Leopard Cat *(Prionailurus bengalensis)* has distinct white spots behind the ears. It hides and rests between boulders or in tree hollows during the day.







紅外線自動攝影機的調查有助研究穿山甲的行為習性。 Camera trap survey contributes significantly to the behavioural study of local Chinese Pangolin (Manis pentadactyla).

滿身鱗片的穿山甲主要以蟻為食,香港僅有零星記錄。為了加強本地和協助鄰近地區的保育工作,漁護署聯同專家制訂《穿山甲物種行動計劃》,透過加強監測、保護生境,以及與非政府和學術機構合作推行研究和公眾教育,讓穿山甲種群得以在本地長遠存活。

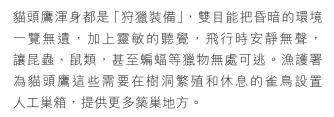
Covered with overlapping scales, the ant-eating Chinese Pangolin (Manis pentadactyla) is one of Hong Kong's most elusive mammals. To better protect this understudied species and enhance the local as well as contribute to regional conservation efforts, the AFCD and experts have formulated the Chinese Pangolin Species Action Plan. The action plan aims to ensure the long-term viability of local pangolin population through strengthened monitoring, habitat protection and collaborations with non-governmental organisations and academic institutions to promote research and public education.





香港濕地公園的人工巢箱 Artificial nest box in the Hong Kong Wetland Park





Owls possess an array of impressive features that make them specialised stealthy hunters. Their keen night vision pierces the dark, whereas their excellent hearing and silent flight make preys like insects, rodents or even bats virtually impossible to escape. The AFCD has installed artificial nest boxes to provide owls and birds that roost in tree hollows with more nesting and roosting opportunities.



斑頭鵂鶹 Asian Barred Owlet (Glaucidium cuculoides)

紅脖游蛇 Red-necked Keelback (Rhabdophis subminiatus helleri)



香港上至高林溪瀑,下至低窪濕地均蛇蹤處處。蛇類的食性變化多端,當中有專門捕食蝸牛的鈍頭蛇、以幼蟻和蟻卵為食的鈎盲蛇,也有依靠獵食其他小蛇為生的珊瑚蛇,每種都教人嘖嘖稱奇。香港還有不少珍稀的爬行物種,例如全球唯香港特有的爬行動物 — 香港雙足蜥和香港半葉趾虎。

From highland wooded streams to low-lying wetlands, snakes can be found all over Hong Kong's countryside. Their feeding habits differ distinctively among species. Of the local snakes, Chinese Slug Snake (*Pareas chinensis*) is a snaileating specialist; Common Blind Snake (*Indotyphlops braminus*) feeds on ant larvae and pupae; Coral Snake (*Sinomicrurus macclellandi*) is ophiophagous – hunting for other small snakes. Each species exhibits their own wonders that leave us in awe. Hong Kong is also home to several rare and secretive reptiles, including the endemic Bogadek's Burrowing Lizard (*Dibamus bogadeki*) and Hong Kong Tree Gecko (*Hemiphyllodactylus hongkongensis*).

香港半葉趾虎 Hong Kong Tree Gecko (Hemiphyllodactylus hongkongensis)





大壁虎 Tokay Gecko (Gekko gecko)

珊瑚蛇 Coral Snake (Sinomicrurus macclellandi)



蟒蛇 Burmese Python *(Python bivittatus)* 





香港雙足蜥 Bogadek's Burrowing Lizard (Dibamus bogadeki)

紫沙蛇 Mock Viper (Psammodynastes pulverulentus)



大頭龜又名平胸龜、鷹嘴龜。 Big-headed Turtle (Platysternon megacephalum)





年幼的大頭龜多數呈橙棕色,隨著成長漸變成黃褐色。 Juvenile Big-headed Turtle (*Platysternon megacephalum*) generally has a chestnut brown colour overall which turns dull when mature.



大頭龜的頭部不能縮進殼內。 Big-headed Turtle (*Platysternon megacephalum*) is unable to retract its head into the shell.



香港的原生淡水龜主要棲息於山澗、水塘和沼澤,發達的四肢和強爪有利牠們沿石攀爬。牠們的保護色甚佳,金錢龜(三綫閉殼龜)背甲上的三道縱棱恍如葉脈,大頭龜由鱗片覆蓋的尾巴則看似掩映在淺溪水潭裏的枯枝。

香港所有野生龜類均受到法例 保護,漁護署透過定期巡查郊 野、搜索陷阱及打擊非法捕獵 等,保護本地稀少的淡水龜種群。 Aided by strong and clawed limbs, the native freshwater turtles in Hong Kong are adept climbers, inhabiting local hill streams, reservoirs and marshes. Among the well-camouflaged turtles, the Golden Coin Turtle (Cuora trifasciata) carries three "leaf-vein" keels on its carapace, while the scaled tail of Bigheaded Turtle (Platysternon megacephalum) resembles a fallen brown twig, blending flawlessly with the rocky streams and ponds it resides.

All wild turtles in Hong Kong are protected by law. The AFCD carries out regular trap search and crackdown on illegal trapping and poaching to protect Hong Kong's locally scarce populations of freshwater turtles.



金錢龜早期因濫捕以致全球數量鋭減,現時已列為極度瀕危物種。
The global population of the Critically Endangered Golden Coin Turtle (Cuora trifasciata) has declined sharply due to overharvesting.

不論在林蔭下的石溪,或是田野裏的沼澤,總會見 蜻蜓不疾不徐地飛翔。仔細靜觀,牠們的顏色鮮豔 奪目,擁有碧玉眼睛雲母翅,故被稱為「有翅 寶石」。蜻蜓一生大部分時間都以稚蟲形態在水中 生活,以蝌蚪、小魚和其他水生昆蟲為食。稚蟲經 多番蜕皮後,便會在合適的季節爬出水面,羽化為 成蟲,依水停佇和起舞。

Dragonflies can often be seen performing their aerial acrobatics and manoeuvres over wooded streams, open fields and marshes. Their majestic beauty makes them among the most dazzling of our insects. The sheen of their iridescent wings and metallic bodies surely make them the "winged jewels" of the sky. Dragonflies spend most of their lives underwater as larvae, feeding on tadpoles, small fishes and other aquatic invertebrates. Following multiple times of moulting, the grown larvae will leave the water and emerge as adults, darting and hovering along the waterside.



香港鐮扁蟌 Blue-tailed Shadowdamsel (Drepanosticta hongkongensis)

中華長鈎春蜓 Chinese Hooktail (Ophiogomphus sinicus)







曉褐蜻 Crimson Dropwing (Trithemis aurora)



圓臀大蜒屬蜻蜓的稚蟲 Larva (nymph) of *Anotogaster* cf. *klossi* 





膨腹斑小蜻避暑時會將腹部提高,避免陽光 直射身體,降低熱力吸收。 Emerald Dwarf (Nannophyopsis clara) cools off in hot days by raising its abdomens, reducing the surface area exposed to the sun.





香港南海溪蟹常見於河岸邊。 Nanhaipotamon hongkongense is commonly found along riverbanks.



紫身枝牙鰕虎魚 Stiphodon atropurpureus



香港的淡水魚分布廣泛,高地山溪有適應湍流的爬鰍類,低地 近河口則見各種鰕虎魚。淡水蝦、蟹等底棲生物能促進水中的 養分循環,是維持水生生態系統健康不可或缺的類群。漁護署 已將部分擁有多種或罕見物種及生物群落的天然河溪,如大蠔 河、丹山河等列為具重要生態價值河溪,使在附近進行的工程 需充分顧及和保護其自然狀態、景觀與生態價值。

Freshwater fish inhabits watercourses across Hong Kong. Loaches adapted to swift-flowing currents live upstream, while various gobies thrive near lowland estuaries. Benthic invertebrates like freshwater shrimps and crabs facilitate nutrient cycling in water and are essential to healthy aquatic ecosystems. The AFCD has identified natural streams and rivers that support diverse or rare species and communities, like Tai Ho Stream and Tan Shan River, as Ecologically Important Streams. Works within the vicinity of these streams shall fully consider and strive to preserve their naturalness, landscape and ecological value.



米蝦 Caridina logemanni

躲藏在黑珊瑚裏的幼魨魚。

寬領鳚常藏在鋸齒刺星珊瑚的蛀洞裏。 Boreholes of the hard coral *Cyphastrea serailia* make good shelters for marine life like the Laiphognathus Blenny (*Laiphognathus* sp.).







香港約有300多種蟹類,不少像藍花蟹般有保護色,潛伏石底。 Among the 300 crab species in Hong Kong, many like the Blue-swimming Crab (Portunus pelagicus) are camouflaged and lurk quietly under boulders.

一個健全的珊瑚群落好比海洋裏的熱帶雨林,眾多生物相生相息,以各種方式在海中適應求存。許多生物會匿藏於沙洞、石隙、甚至其他生物當中,藉以躲避捕食者。然而,捕食者也有天衣無縫的保護色作喬裝,不著痕跡地靜待獵物。

A healthy coral community is like a rainforest in the ocean. Countless marine organisms live alongside each other, and all of them find their own way to adapt and flourish in the sea. When evading predators and hunting prey, stealth is often the key. Myriads of animals choose to take cover and shelter in sand holes, crevices, or even inside other creatures to hide from threats. Nevertheless, most predators possess the perfect disguise of camouflage that help them stay unnoticed while hunting.



賴氏犁齒鳚常棲息於空的藤壺殼內。 Stellar Rockhoppers *(Entomacrodus lighti)* can often be found curling up inside empty barnacles.

躄魚能根據環境改變顏色。 Frogfishes can change colour to mimic its surroundings.





海兔螺能將鮮豔的套膜覆蓋外殼,融入到牠的寄主棘穗軟珊瑚中。 Some false cowries dress their shells with colourful mantles, resembling its soft coral *(Dendronephthya sp.)* host.



部分海蛞蝓能保留獵物的刺細胞作自衛用途。 Some nudibranchs protect themselves by accumulating stinging cells from their consumed preys.







幼鰺魚和蟹類常藏於水母逃避捕食者,同時從水母的獵物裏分一杯羹。 Juvenile jacks and marine crabs often seek shelter in jellyfishes and enjoy a piece of the jellyfishes' catches.

海中絢麗多彩的生物比比皆是,斑斕的色彩既能作為保護色,也可警告和恫嚇捕食者。部分海洋生物會尋找共生夥伴,藉此獲得食物、庇護和藏身之所。不少魚類也會連群結隊,以群居力眾的方式互相保護。

The sea is a dazzling world of colourful and vibrant creatures. Their striking colours serve both as camouflage and a warning sign to ward off and deter predators. Some marine species look for symbiotic partners who can provide food, protection and shelter, while many fish stay in shoals to protect each other by clustering.







海葵有毒的觸鬚能保護其夥伴,寄居蟹會提供食物作為交換,小丑魚 則會驅趕海葵的捕食者。

Sea anemone protects its partners with stinging tentacles. In exchange, the Hermit Crab (*Dardanus* sp.) provides food while the Yellowtail Clownfish (*Amphiprion clarkii*) drives away the host's predators.

## 繁衍與延續

## Propagation and the Continuous Cycles

有別於其他蟹類,雄性招潮蟹的雙螯大小差異 懸殊。雄蟹會在泥灘上頻繁揮動大螯展現魅力, 盼獲得雌蟹青睞,亦因動作恰似把潮水招回而得 其名。雄蟹的大螯還能嚇唬對手,並用作打鬥 的武器。有些物種也會用步足挖起沙泥,帶到 洞口築成弧塔,吸引雌蟹到訪。

Unlike other crabs, the most remarkable characteristic of male fiddler crabs is the striking contrast in size between the two chelipeds. Their larger major cheliped is used mainly in waving display and to deter or fight with other males. Courting males of some species also build sand hoods with their walking legs outside their burrows to attract visiting females for mating.

雄性清白招潮蟹的弧塔 Hood of a male Austruca lactea





雄蟹爭鋒時先會舉螯警告,時會動武,直至其中一方落荒而逃為止。

Male fiddler crabs raise their enormous chelipeds as a warning, or following that, launch an attack until the opponent flees.





報喜斑粉蝶 Red-base Jezebel (Delias pasithoe)



褐斑鳳蝶 Tawny Mime (Papilio agestor)

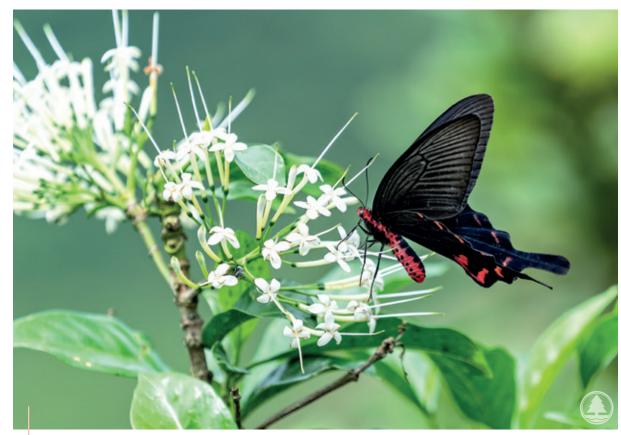


| 亮灰蝶 | Long-tailed Blue (Lampides boeticus)



擁有登峰習性的蝴蝶會飛往附近的高嶺聚集。 雄蝶抵達後會先盤踞樹梢高處,等待雌性, 也不時與其他雄蝶你追我趕。求偶中的蝴蝶會 互相追逐纏繞,雌蝶完成交配後便會下山, 尋找合適的寄主植物產卵。同種的登峰時間相 若,可節省尋找配偶所需的能量,也讓數量 較少的物種遇上彼此。

Butterflies with hill-topping behaviour often head uphill and aggregate at nearby summits and mountain ridges for mating. Male butterflies first compete for the best vantage point among top branches and wait for approaching females. Every so often, these males defend their territories by chasing off other male competitors. The butterflies then get into spiral dances of courtship and mating, after which the females descend to search for suitable host plants to lay eggs. By assembling at the hilltop simultaneously, individuals of the same species can save the energy searching for mates, and species with a smaller population can also better come across their same kind.



中華麝鳳蝶和香港大沙葉 Chinese Windmill (Byasa confusus) and Hong Kong Pavetta (Pavetta hongkongensis)



漁護署會定期為香港的鷺鳥林進行監察和調查(圖中白點為棲息中的鷺鳥巢)。 The AFCD conducts regular monitoring and survey for local egretries (active egret nest appears in white).







鷺鳥會在繁殖季節長出飾羽吸引異性。 During breeding seasons, ardeids display mesmerising plumage to attract mates.

每逢三至八月是香港鷺鳥的繁殖季節,數以 千計的鷺鳥,如小白鷺、大白鷺、牛背鷺、 夜鷺和池鷺會集聚築巢,場面壯觀。香港約有 20多個鷺鳥林,除了位處后海灣範圍及離島 外,還有部分散落在鬧市中。成雙的鷺鳥會撿 拾巢材,在樹或竹林上築巢和孵育雛鷺,鳥聲 不絕於耳。

Ardeids in Hong Kong generally breed between March and August. Congregating in their thousands, Little Egrets (Egretta garzetta), Great Egrets (Ardea alba), Eastern Cattle Egrets (Bubulcus coromandus), Black-crowned Night Herons (Nycticorax nycticorax) and Chinese Pond Herons (Ardeola bacchus) are the common local ardeids that nest and breed in colonies. There are more than 20 egretries in Hong Kong, some situated at the Deep Bay area and remote islands, others scattered across the hectic urban centres. Paired ardeids will gather nesting materials and raise their young atop trees and bamboo thickets.



盧氏小樹蛙是香港的特有種。 Romer's Tree Frog (*Liuixalus romeri*) is endemic to Hong Kong.

香港的春夏正值雨季,大部分兩棲類會到水中繁殖,草深無處不鳴蛙。 相反,在秋冬蟲鳴稀落之際,卻是香港瘰螈的活躍交配季節。香港不少 保護區已涵蓋兩棲類的重要生境,漁護署也為香港特有的盧氏小樹蛙 制定保育計劃,悉力監察種群的數量和狀況。

Over the spring and summer, most amphibians in Hong Kong return to water to breed, announcing the wet season with a symphony of mating calls. Hong Kong Newt (*Paramesotriton hongkongensis*) is the odd one out, with their breeding season falling in the chilly autumn and winter. Protected areas in Hong Kong have encompassed most of the important habitats for local amphibians. In particular, the AFCD has formulated a conservation plan and dedicated conservation efforts to survey and monitor the population of Hong Kong's endemic Romer's Tree Frog (*Liuixalus romeri*).

香港湍蛙 Hong Kong Cascade Frog (Amolops hongkongensis)





香港湍蛙會把卵黏在湍急溪流的石縫裏。 Hong Kong Cascade Frog (Amolops hongkongensis) lays eggs in shaded rock crevices of turbulent streams.

幼瘰螈頭後長有像鬃毛的外鰓。 Juvenile newt grows bristle-like external gills behind the head.



成年的香港瘰螈 An adult Hong Kong Newt (Paramesotriton hongkongensis)





每隻香港瘰螈的腹部斑紋均獨一無二。 Each Hong Kong Newt (Paramesotriton hongkongensis) has its own unique orange ventral pattern.



雌性瘰螈交配後會把卵黏附在水底植物上。 Female newt glues her eggs onto submerged plants after mating.

灰褐色的小蹄蝠幼蝠紧 抱母蝠。 Pups of Pomona Leaf-

Pups of Pomona Leafnosed Bat (*Hipposideros pomona*) clinging tightly onto their mothers.



香港多數的蝙蝠會在秋天交配,翌年春末夏初產子。妊娠中的中華菊頭蝠會在棲所聚居生產,形成育幼群。初生的幼蝠首數天會先依附母蝠,形影不離。但隨著幼蝠成長,母蝠會在晚間外出覓食時,一同留下幼蝠互相靠攏取暖。母蝠回到棲所後會憑叫聲和氣味找回自己的孩子哺育。

Most of the bats in Hong Kong mate in the autumn and give birth in the following late spring or early summer. During pregnancy, females of Chinese Horseshoe Bat (Rhinolophus sinicus) often aggregate and form nursery roosts, where they give birth and rear their young. These mothers usually carry their young for the first few days, nursing and being closely attached to the pups. As the pups grow bigger, the mothers will settle them in the nursery roost, hinging together for warmth, before taking off to forage at night. When the mothers return, they locate and identify their own pups through smell and sound.



中華菊頭蝠的育幼群 A nursery roost of Chinese Horseshoe Bat (Rhinolophus sinicus)



蝙蝠是唯一能真正飛行的哺乳類動物。香港所有蝙蝠均受法例保護。 Bats are the only true flying mammals. All bats in Hong Kong are protected by law.

土沉香已被世界自然保護聯盟列為易危物種,並屬於國家二級保護野生植物。 Incense Tree (Aquilaria sinensis) is categorised as "Vulnerable" by the IUCN and included in the List of Wild Plants under State Protection (Category II) of China.





成熟的果實會吸引黃蜂前來取食和播種。 The ripen fruit attracts hornets to feed and disperse the seeds.

將近夏末,成熟的土沉香果實會裂成兩瓣,懸掛著種子隨風飄盪。由於土沉香用途廣泛,價值不菲,非法砍伐使野生種群數量大幅減少。漁護署制訂的《土沉香物種行動計劃》透過各政府部門、學術機構和社區協作,推行一系列保護本地土沉香的措施,例如巡邏非法砍伐黑點、裝設監測儀和樹木保護圍欄、與內地執法機關交流,以及推廣與土沉香保育相關的教育活動等。

Come late summer, the ripen capsules of Incense Tree (Aquilaria sinensis) open into two halves, swaying the seeds in the wind. Offering multiple practical uses and of great economic value, wild populations of Incense Tree have been depleting over the past years due to illegal felling and harvesting. Under the Incense Tree Species Action Plan, the AFCD has launched a series of measures to protect this valuable species in collaboration with other government departments, academic institutions and the local communities. These conservation actions include stepping up patrol of illegal felling blackspots, installing surveillance devices and protective tree guards, strengthening the exchange with enforcement authorities from the Mainland and promoting education programmes related to Incense Tree conservation.

## 遷徙與過冬

### Migration and the Winter Wonderland

踏進十月,大量斑蝶會從北方南遷香港,在山谷中群聚度冬。斑蝶群會精挑鄰近溪流的樹林,停棲在偶有陽光灑落,還可遮風擋雨的樹上。香港主要的斑蝶越冬地包括屯門小冷水和深水灣,小冷水更被列為具特殊科學價值地點,以保護這個特殊的生態現象和棲息地。

Heat fades, and the autumn approaches. In October, thousands of Danaid butterflies begin to migrate south to Hong Kong and aggregate in valleys to escape the harsh northern winter. These overwintering butterflies search for wooded areas close to flowing streams, where they can bask and shelter from wind and rain. Siu Lang Shui in Tuen Mun and Deep Water Bay are examples of the major overwintering sites for Danaids in Hong Kong. Siu Lang Shui has also been designated as a Site of Special Scientific Interest to protect this miraculous ecological spectacle and habitat.



一個越冬群落動輒會有成千上萬隻斑蝶,遠看猶如掛在藤蔓上的枯葉。 An overwintering aggregation can comprise over thousands of Danaid butterflies, hanging like clusters of withered leaves as seen from afar.

斑蝶群棲能減少失溫,遇到天敵則可群飛擾敵。 By aggregating, Danaids can reduce heat loss and swarm to confuse predators.



#### 遷徙與過冬 Migration and the Winter Wonderland

普通朱雀 Common Rosefinch (Carpodacus erythrinus)





銅藍鶲 Verditer Flycatcher (Eumyias thalassinus)

秋風起,在中國東北等寒冷北方棲息的鳥類會紛紛南遷過冬。香港多樣的生境為冬候鳥和過境遷徙鳥提供合適的補給 站與度冬地。樹林和灌叢能為林鳥提供不同的果實和昆蟲, 泥灘、基圍和魚塘等濕地則有繁多的魚蝦蟹螺,讓水鳥 充飢。

As winter draws near, birds in the chilly north like northeast China head south in astounding numbers for milder climes and resourceful habitats. Access to such varying habitats has made Hong Kong an ideal stopover and wintering ground for winter visitors and passage migrants. Woodland and shrubland provide all sorts of fruits and insects for forest birds, whereas wetlands like mudflat, *gei wai*, and fishpond hum with life as a multitude of waterbirds flock in for their feasts.





灰背鶇 Grey-backed Thrush (Turdus hortulorum)



在秋天收割的同時,塱原部分稻田會保留作遷徙中的極危黃胸鵐(禾花雀)的棲息地。 During the autumn harvest, some paddy fields in Long Valley are reserved for the migrating, globally Critically Endangered Yellow-breasted Bunting *(Emberiza aureola)*.

每逢冬季,米埔內后海灣拉姆薩爾濕地 都會迎來數以萬計的水鳥,是眾多候鳥 的重要度冬地。漁護署在這片國際重要 濕地推行管理計劃,全面保育到來度冬 的候鳥及其他野生生物。 Each winter, the Mai Po Inner Deep Bay Ramsar Site is filled with shimmering flocks of waterbirds, serving critically as a wintering ground for migratory birds. In light of such ecological significance, the AFCD has implemented a management plan to thoroughly conserve the migratory birds and other wildlife in this internationally important wetland.

小杓鷸 Little Curlew (Numenius minutus)

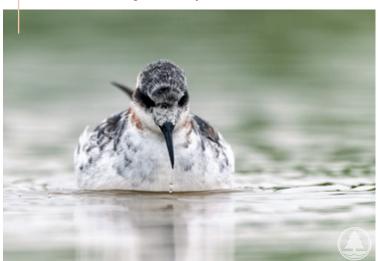




中杓鷸 Eurasian Whimbrel (Numenius phaeopus)



紅頸瓣蹼鷸 Red-necked Phalarope (Phalaropus lobatus)







環頸鴴 Kentish Plover (Charadrius alexandrinus)





鋸角雪螢成蟲 Adult Snowy Window Firefly (Diaphanes lampyroides)



螢火蟲總是讓人聯想到炎炎仲夏,事實上,那些點點幽光也會在歲暮天寒中飛舞拖曳。鋸角雪螢的成蟲身披晶瑩透亮的鞘翅,主要活躍於冬季月份。雄螢入夜後會在冷冽的密林中穿梭,利用微光誘導不會飛的雌螢發光回應,尋覓彼此。

冬去,春來。四季景致互相交替,萬物 循環不息。 Fireflies always call to mind the scorching summer. In fact, some of these enthralling beetles glow and dance their way into the crisp winters. The adult Snowy Window Firefly (*Diaphanes lampyroides*) puts on its gleaming armour-like elytra and emerges during the winter months. After the sun sets, the males will cruise through the woods to search for flightless females by emitting continuous, delicate glows.

As winter draws the year to a close, spring arrives with its rousing warmth. Seasons come, and seasons go. Life continues to flourish and the landscapes unfold.



# 與大自然共存

### Co-existing with Nature

人與大自然是生命共同體,存在環環相扣、密不可分的關係。大自然賜予我們賴以為生的資源,默默地提供 各種生態系統服務,是如今繁榮的本源。

人因自然而生,自然因人而美。要和大自然和諧共存, 我們先要懂得尊重自然、順應自然、保護自然, 把可持續和生態文明融入日常生活。

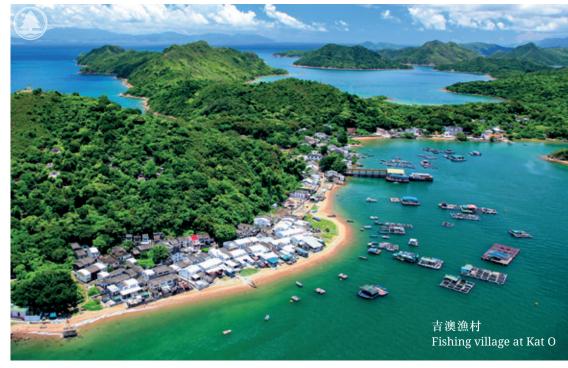
Human and nature is a community of life and inseparable bonding. Nature bestows upon us life-supporting resources and provides us with various ecosystem services that are the very roots of our prosperity.

We exist because of nature, and the nature flourishes because of us. To co-exist with nature, we shall learn to respect, accommodate and protect her, and treat sustainable culture and ecological civilisation as essential parts of our everyday lives.









香港的鄉郊村落枕山環水,特色各異。規模較大的形成圍村,村舍排列儼然有序, 也有小村零散隱伏在幽谷深處。村民世代傳承的生活方式和智慧,大多與自然息息 相關,種茶割禾、捕魚曬鹽、採果入藥,對身邊的草木心存敬畏和感恩。風水林正是 村民和自然和平共處的產物,無疑是本地最珍貴的天然和文化遺產之一。

Set by natural streams and backing onto mountains, rural villages in Hong Kong each have their own unique character. Large villages are walled with houses neatly arranged within, whereas small quaint settlements are scattered deep in the verdant wilderness. Villagers have lived with their bucolic lifestyle and traditional wisdom, handed down from generation to generation. The villagers constantly treat nature with respect and gratitude. *Fung shui* wood, in particular, is the fruit of co-existence between villagers and nature, and is undoubtedly one of Hong Kong's most precious natural and cultural heritage.





鹽田仔 Salt pans at Yim Tin Tsai



環境保護署於2018年成立鄉郊保育辦公室,以統籌及促進偏遠鄉郊的可持續發展,保護當地的自然生態、活化村落建築環境,以及保育人文資源和歷史遺產。 「荔枝窩自然管理協議」由非政府機構與村民、農友等合作,以環境友善的農耕方式加強生態管理,活化鄉郊社區。

In 2018, the Countryside Conservation Office was established under the Environmental Protection Department to coordinate and promote sustainable development of Hong Kong's remote countryside, and conserve the local ecology, architectural environment of villages, and cultural heritage resources therein. Partnering between non-governmental organisations, local community and farmers, the Management Agreement at Lai Chi Wo Enclave aims to enhance the ecological management and revitalise the rural community with eco-friendly farming practices.

在學者、村民、非政府組織和商界的共同努力下,香港大學在 荔枝窩的永續鄉郊活化項目榮獲「2020年聯合國教科文組織 亞太區文化遺產保護獎—可持續發展特別貢獻獎」殊榮。

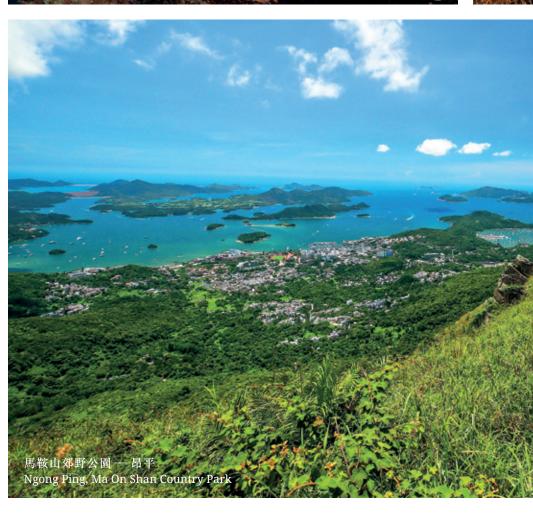
With concerted efforts of academics, villagers, non-governmental organisations and the business sector, the rural revitalisation project at Lai Chi Wo initiated by the University of Hong Kong has received the prestigious "Special Recognition for Sustainable Development" in the "2020 UNESCO Asia-Pacific Awards for Cultural Heritage Conservation".

龍蝦灣 Lung Ha Wan



果洲群島 Ninepin Group





麥理浩徑第七段 — 針山 Needle Hill, MacLehose Trail Section 7



探遊香港的大自然,最大樂趣在於置身多姿多彩的郊野環境,享受那份每每觸動心弦的驚豔感覺。以自在的步調,探林、游海、穿村、走徑,投入香港那不為人知的青山綠水,細味大自然的千姿百態。

The greatest delight in exploring Hong Kong's countryside lies in the sensational but yet unexpected landscapes. Embark on a journey in search of the irresistible pulse of life. Through the tranquil woods, shimmering waters, picturesque villages and trails, the many stunning faces of nature never cease to amaze.





大欖郊野公園 — 大棠楓香林 Tai Tong Sweet Gum Woods, Tai Lam Country Park

馬鞍山高聳矗立。

Ma On Shan towering over the lowland urban district.





職頭濕地臨迎東涌灣,是馬蹄蟹重要的棲息地。 San Tau wetland at Tung Chung Bay is an important habitat for local horseshoe crabs.



屯門菠蘿山 Por Lo Shan, Tuen Mun

臨高望遠,都市看似遙遙,山麓下卻是千家萬戶的 安居之所,高樓星羅棋布,與郊野只是咫尺之遙。 一個發展迅速和人煙稠密的城市能與大自然緊鄰 相依,放眼世界實屬難得。 The urban high-rises seem a world away, yet Hong Kong's familiar tower blocks are just a stone's throw from nature. One could hardly find a bustling and densely populated metropolis set in such proximity to the countryside.



馬鞍山昂平 Ngong Ping, Ma On Shan

赤紅山椒鳥 Scarlet Minivet (Pericrocotus speciosus)







香港公園 Hong Kong Park

玉帶鳳蝶 Common Mormon (Papilio polytes)



斑腿泛樹蛙 Brown Tree Frog (Polypedates megacephalus)





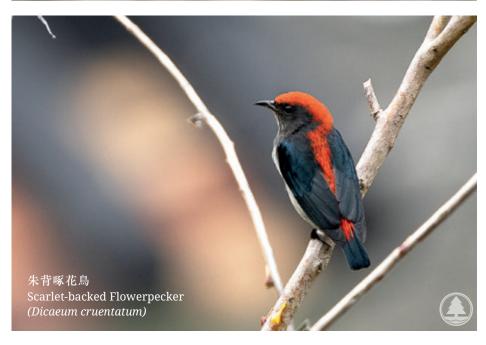
夜鷺 Black-crowned Night Heron (Nycticorax nycticorax)

香港的生態之趣,並非遙不可及。在繁華的水泥叢林裏,都市的綠化地帶連接各區公園和河道,與人為鄰的生物其實處處皆是。園林綠化不僅為各種生物提供棲所,更能帶來多種生態系統服務,如吸存二氧化碳、調節熱島效應和提升城市的生活質素。

In Hong Kong, the beauty of nature is close at hand. In this bustling concrete jungle, city green belts connect urban parks and watercourses, supporting myriads of urban wildlife that thrive at our doorstep. Urban greeneries provide habitats for urban-dwelling species and ecosystem services, including carbon dioxide sequestration, regulation of heat island effect and enhance quality of urban life.

黄眉姬鶲 Narcissus Flycatcher (Ficedula narcissina)





香港的市區公園多散落在高樓之間。為市民提供休憩場所之餘,公園裏的林木、水景設施和自然保育園地連成生境網絡,加上多種蜜源及蝴蝶幼蟲寄主植物,成為城中重要的棲息地。在鬧市綠洲中放慢腳步,靜觀花開,細聽鳥語,即使身處急促的都市節奏中,也能保持身心健康。



部分市區公園是過境遷徙鳥的中途補給站。 Some urban parks are stopovers for passage migrants.

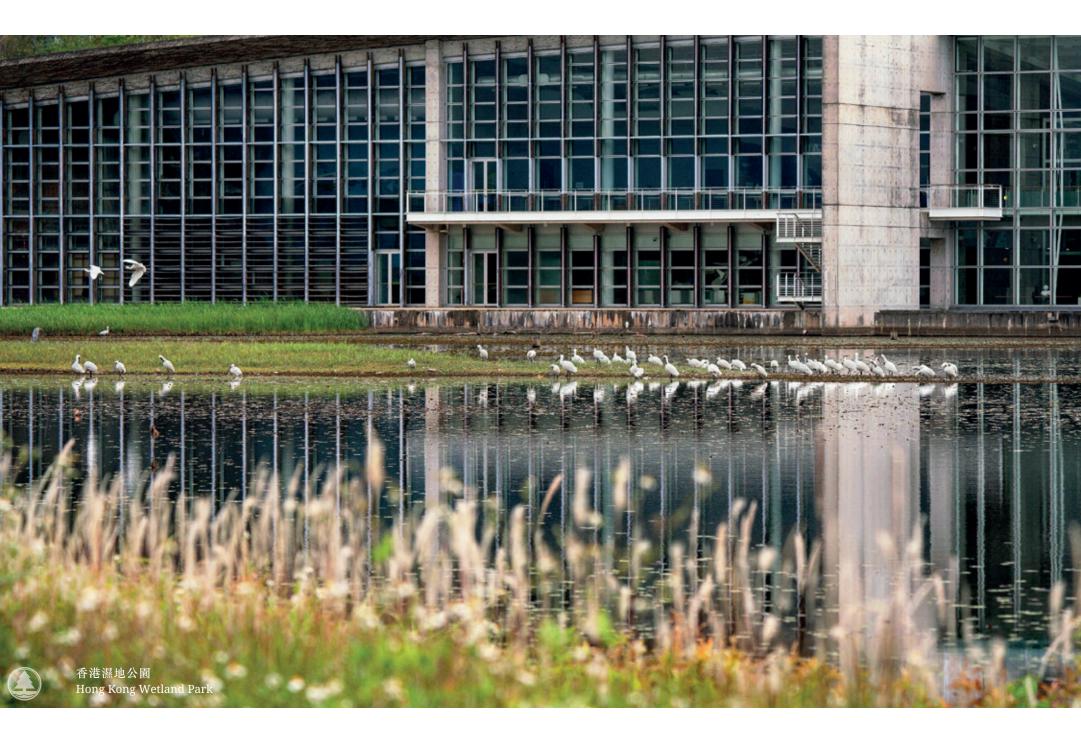


Nestled among skyscrapers, urban parks in Hong Kong not only serve as recreational spaces, but also networks of habitats that interconnect woods, water features, conservation corners and diverse arrays of nectar and butterfly larval host plants. Unwinding from the hustle and bustle of the city, one can easily savour nature from these urban oases, and enjoy a healthy lifestyle among the blossoming flowers and chirping birds.





暗綠繡眼鳥 Swinhoe's White-eye (Zosterops simplex)



香港濕地公園位於天水圍市鎮北部,是一個集自然護理、 環境教育、綠色旅遊和康樂用途的世界級生態景點。園內為 水鳥和野生動物提供不同生境,並設有展覽廊和觀鳥屋等設 施,從不同角度展示濕地的生態和價值。香港濕地公園會定 期舉辦導賞團、公眾講座、工作坊和專題活動,讓市民和遊 客認識濕地對生物多樣性、自然保育和文明發展的重要性。

Located in the northern part of Tin Shui Wai, the Hong Kong Wetland Park is a world-class eco-attraction that incorporates conservation, environmental education, ecotourism and recreation. The park provides diverse wetland habitats for waterbirds and wildlife, as well as galleries and bird hides to demonstrate the ecology and value of wetlands. The Hong Kong Wetland Park organises guided tours, public lectures, workshops and thematic programmes which offer the public and visitors opportunities to explore the important roles of wetlands in biodiversity, conservation and civilisation.





河畔觀鳥屋 Riverside Hide

濕地遊蹤 Wetland Footprints





自然探索班 Nature Exploration Class

#### 公眾植樹活動 Public tree planting activity



自然保育的成功,全賴市民的支持及參與。 漁護署自2010年起推行「體驗自然」郊野公園 教育活動,加深公眾認識本地郊野、地質和 生物多樣性。「郊野公園義工計劃」更讓市民參 與巡邏、導賞及植物護理等工作,將自然保育 付諸行動。漁護署近年亦向公眾宣傳「山海 無痕」的郊遊文化,鼓勵郊遊人士「自己垃圾自 己帶走」,合力保護香港的自然郊野。

The success in nature conservation hinges upon public support and engagement. Since 2010, the AFCD has launched the "Nature in Touch" Country Parks Education Programme to broaden the public's knowledge of the local countryside, geology and biodiversity. The Country Parks Volunteer Scheme encourages the public to put nature conservation in action, and participate roles in hiking patrol, tour interpretation and flora conservation. In recent years, the AFCD has also promoted the "Leave No Trace at Mountain and Sea" hiking culture to the public, where visitors are encouraged to take their litter home and get involved in protecting Hong Kong's sensuous countryside.

五列木的樹苗 Seedling of Common Pentaphylax (Pentaphylax euryoides)





戶外導賞 Outdoor tours



漁護署於郊野公園裝設加水站, 鼓勵郊遊人士自備水樽,減少 使用一次性塑膠產品。 The AFCD has installed water filling stations in the country parks to encourage visitors to bring their own bottles and reduce using single-use plastic consumables.









NK生物多様性 Odiversit







漁護署近年亦有舉辦「香港生物多樣性節」和推出「心繫自然」網上生態活動平台,並與各政府部門、 大專院校和非政府機構合辦導賞及工作坊等,向公 眾推廣本地的生物多樣性。

To promote biodiversity in local communities, the AFCD has organised Hong Kong Biodiversity Festivals and initiated an online education platform, where government departments, academic institutions, and non-governmental organisations are featured to co-organise events like guided tours and workshops.

漁護署每年會進行香港珊瑚礁普查,並為學生和本地社群舉辦不同的海岸公園教育活動,如公開講座、導賞團、海灘清潔,以及「汀角+大使計劃」及「海岸公園大使計劃」等,鼓勵市民認識和支持香港的海洋護理工作及海岸公園的管理。

Apart from the annual Hong Kong Reef Check, the AFCD has organised different types of marine parks education programmes for students and the local communities, including talks, guided eco-tours, beach clean-up activities, as well as the Ting Kok + Ambassador Scheme and the Marine Parks Ambassador Scheme. These events and programmes aim to foster better public understanding and support the marine conservation work and marine parks management in Hong Kong.

船灣海戶外生態速寫 Outdoor Sketching of Tolo Ecology



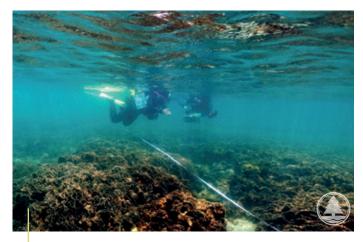
汀角海岸生態保育計劃 Ting Kok Coastal Conservation Plan





赤灣四季賞 Tolo Appreciation





香港珊瑚礁普查 Hong Kong Reef Check

學生於工作坊學習如何辨認及育養珊瑚。 Workshops are organised to equip students with coral identification and nurturing skills.



學生在校內照料珊瑚碎塊。 Students taking care of coral fragments in their school campus.



被育養的珊瑚會索上號碼牌,以便 追蹤復育情況。 Adopted corals are tagged to facilitate tracking upon outplanting.

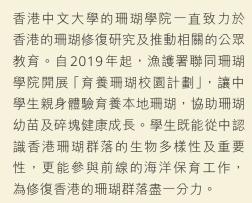




野外的育養平台能讓珊瑚慢慢恢復和適應 海洋環境,為將來回歸海床作準備。 Nursery table allows corals to recover and adapt to the marine environment before being outplanted onto the seafloor.



已移植到野外的珊瑚吸引了其他海洋生物。 Outplanted corals have attracted many other marine organisms.



Coral Academy of the Chinese University of Hong Kong has all along endeavoured in coral restoration research in Hong Kong and the promotion of public education. Since 2019, the AFCD and Coral Academy have been co-organising the Coral Nursery Education Programme, providing students with hands-on experience of nurturing local coral juveniles and fragments. Apart from learning about the biodiversity and importance of local coral communities, the students are placed at the frontline of marine conservation work and be able to contribute directly towards coral restoration in Hong Kong.



海下遊客中心 Hoi Ha Visitor Centre



位於西貢的海下遊客中心於2021年6月正式 啟用,是香港首個以海岸公園為主題的遊客中 心。中心設有展覽廳向公眾介紹香港的海岸保 護區域及其海洋生態資源、海岸公園的管理及 保育措施、海下的歷史及現時海洋面對的威脅 等資訊。中心亦採用了多項環保減碳設施, 例如太陽能發電板、雨水收集系統及生物污水 處理系統,減少對周邊環境造成影響。

Opened in June 2021, the Hoi Ha Visitor Centre nests in the lush greens of Sai Kung and is Hong Kong's first thematic marine park visitor centre. The exhibition hall introduces Hong Kong's marine protected areas and ecological resources, marine park management and conservation measures, the history of Hoi Ha and current threats to the marine environment. The centre has also adopted a number of green features such as solar photovoltaic panels, rainwater collection system and bio-treatment plant to minimise the impact on the surrounding environment.





中心透過介紹珊瑚的生態,提高市民對海洋保育的意識。 The centre introduces coral ecology to raise public awareness on marine conservation.

研究團隊會定期監察和評估礁盤對珊瑚修復的成效。 Regular monitoring and assessment have been conducted by the research team to evaluate the effectiveness of coral restoration on reef tiles.





研究團隊於海下灣海岸公園設置珊瑚礁盤,並將珊瑚碎片移植到礁盤上,以提高珊瑚的存活率。 The deployed reef tiles in HHWMP have been seeded with coral fragments to enhance coral survival.



漁護署早前聯同香港大學的海洋生物學家和建築學者,在海下灣海岸公園進行了一項珊瑚修復研究。研究團體利用三維打印技術製作「珊瑚礁盤」,複雜的結構能讓珊瑚依附並穩固生長,設計亦能防止沉澱物積聚,藉以加快香港水域的珊瑚復育進程及更有效地保護海洋生物多樣性。

The AFCD, in collaboration with marine scientists and architects from the University of Hong Kong, are working jointly on a coral restoration project in Hoi Ha Wan Marine Park (HHWMP) using specially designed 3D-printed "reef tiles". These artificial reef tiles feature a structurally complex foundation to enhance coral attachment and prevent sedimentation, with an aim to facilitate coral restoration in local waters and conserve marine biodiversity in a more effective manner.







# 邁向可持續發展 的大灣區

### Towards a Sustainable Greater Bay Area

位於珠江三角洲平原之上,粵港澳大灣區各座城市緊密相連,共享大灣區內的天然資源和豐富的生物多樣性。 《粵港澳大灣區發展規劃綱要》中提及,粵港澳會密切合作,共同改善生態環境系統,建設生態文明,使大灣區 「天更藍、山更綠、水更清、環境更優美」。

Set on the Pearl River Delta, cities of the Guangdong-Hong Kong-Macao Greater Bay Area are closely connected by sharing the natural resources and rich biodiversity of the Greater Bay Area. As proposed by the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area, Guangdong Province, Hong Kong and Macao will work closely to improve ecological and environmental quality, and implement ecological civilisation, making the Greater Bay Area "a place with bluer skies, greener mountains, clearer water and a better environment".

### 生物多樣性主流化 Biodiversity Mainstreaming

實現保育生物多樣性與可持續發展需要 社會各方攜手協力。香港積極推動公私營 界別在相關政策、計劃、工程及項目中加 入保育生物多樣性的考慮,使生物多樣性 主流化,以達致可持續發展。 Getting society-wide support sets the scene for conservation of biodiversity and sustainable development. Hong Kong is making dedicated efforts to encourage the public and private sectors to mainstream biodiversity by incorporating biodiversity considerations in their policies, plans, works and projects.





#### 生物多樣性主流化 Biodiversity Mainstreaming

工程前:上羗山的天然山坡曾發生多次山泥傾瀉,緊急鞏固工程為山坡留下約4500平方米的噴漿面疤痕。 Before: With numerous landslides happened on the natural slopes of Upper Keung Shan in West Lantau, the emergency slope stabilisation works left shotcrete scars of about 4500 m² across the natural hillside.



西大嶼山上羗山的天然山坡工程採用了「土壤生物工程」措施,在改善斜坡安全的同時,亦作出令自然生態可持續發展的貢獻。 此項目榮獲土木工程拓展署「2020年可持續 斜坡美化大獎」的「天然山坡」組別冠軍。

The slope works at the natural terrain of Upper Keung Shan in western Lantau adopted soil bioengineering measures to improve slope safety and integrate landscape design with ecological and sustainability considerations. This project was the champion of the "Natural Terrain Catchment Category" in the "2020 Sustainable Slope Excellence Award" organised by the Civil Engineering and Development Department.



工程後:斜坡上的噴漿面移除後被換上植被系統,並種有原生植物物種以提高生物多樣性。一年過後,原本疤痕斑斑的山坡已經草木繁茂。

After: Shotcrete was removed from the slope and replaced by engineered vegetation systems, in which native plant species were planted to enhance biodiversity. The scarred landscape was well vegetated with green plants a year later.

位於屯門的T • PARK [源 • 區]

T • PARK, Tuen Mun

紅蜻 Crimson Darter (Crocothemis servilia servilia)









[源•湖] T•HABITAT

T·PARK[源·區]是一所自給 自足,結合先進科技於休閒。 處理設施。T·PARK[源·區]收, 處理設施。T·PARK[源·區]收, 處理設施。T·PARK[源·區]收, 還港主要污水處理廠的污泥。 過程中所產生的熱能會被回時 過程中所產生的熱香港提供填戶 轉化為電力方案,減輕堆填區建 時代源。 設計,是香港綠色廢物處理基建 的新典範。設施內的綠化 設計, 發達 的新典範。 設有供野生生物棲 園林濕地T·HABITAT[源·湖]。

T • PARK is a self-sustained sludge treatment facility that combines a variety of advanced technologies with recreational, educational and ecological features in a single complex. Sludge from major sewage treatment works in Hong Kong is delivered to T • PARK for treatment by advanced incineration technology. Heat energy generated by the incineration process is recovered and converted into electricity. It is a sustainable waste-to-energy solution for Hong Kong, which helps relieve the pressure on landfills. The facility is an excellent example of sustainable architectural design, setting new standards for green infrastructure in Hong Kong. Greeneries in T • PARK accounts for 70% of the total area, and T • HABITAT, a reinstated sanctuary, provides habitats and feeding grounds for wildlife.

#### 生物多樣性主流化 Biodiversity Mainstreaming



石斑木 Hong Kong Hawthorn (Rhaphiolepis indica)



建造業零碳天地是香港第一座零碳建築的所在地,綠化覆蓋率高達47%,當中的「都市原生林」種植了多種原生植物,為野生動物提供食物和棲息地。

The CIC-Zero Carbon Park is home to the first zero carbon building in Hong Kong, with 47% of the site covered with greenery. A diversity of native trees and shrubs was planted in the "Urban Native Woodland" to provide food and shelter for wildlife.





建造業零碳天地 CIC-Zero Carbon Park

排洪河道是重要的生態走廊,治理工程除了 提升其排洪能力外,渠務署亦於治理工程 注入了綠化及生態保育等元素。渠務署近年 於大埔下林村河,開展生態改善試驗研究, 將混凝土河床轉換為更加天然的河床和河岸 帶,營造微生境及促進生物多樣性。 Drainage channels are important eco-corridors. In addition to improving drainage capacities, the Drainage Services Department has incorporated greening and ecological conservation elements into river improvement works. In an ecological enhancement site trial conducted at Lower Lam Tsuen River in Tai Po, concrete bedding was replaced by more natural river bed substrates and riparian zones to create microhabitats and promote biodiversity.

於進行生態改善試驗工程前的下林村河 Lower Lam Tsuen River before the ecological enhancement site trial



異鱲屬《中國瀕危動物紅皮書》的易危物種。 Predaceous chub *(Parazacco spilurus)* is listed as "Vulnerable" in the China Red Data Book of Endangered Animals.

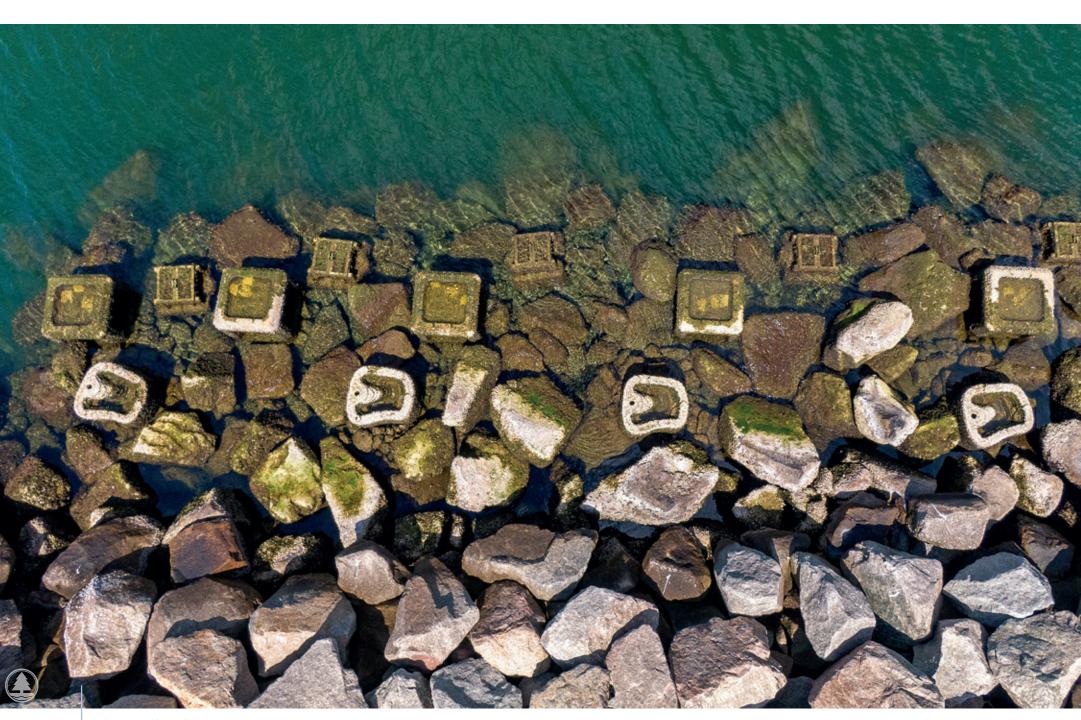


北江光唇魚為受保育關注的物種。 Acrossocheilus beijiangensis is a Species of Conservation Concern.



於進行生態改善試驗工程後的下林村河 Lower Lam Tsuen River after the ecological enhancement site trial





生態海岸線實地試驗 Eco-shoreline field trial

生態海牆磚 Enhanced seawall panels



生態海岸線將生態概念融入海堤設計,除了作為海岸防禦結構外,亦為海洋生物提供棲息的地方,促進海洋生態和生物多樣性。土木工程拓展署與本地大學合作,研究在香港應用和發展不同生態海岸線模式的可行性。東涌新市鎮擴展計劃亦會引入和建造生態海岸線。

Eco-shoreline integrates ecological concepts into seawall design. In addition to serving as a shoreline protection structure, it creates habitats and feeding grounds for marine life and promotes marine ecology and biodiversity. The Civil Engineering and Development Department has been collaborating with local universities to explore the feasibility of applying and developing various types of eco-shorelines in Hong Kong. Eco-shoreline designs will also be incorporated in the Tung Chung New Town Extension project.

生態海岸線為海洋生物提供棲息之所。 Eco-shorelines provide habitats for marine life.





潮汐池 Tidal pool

### 區域合作與交流 Regional Cooperation and Exchange

《粵港澳大灣區發展規劃綱要》中強調對重要生態系統實施保護和修復,構建生態廊道和生物多樣性保護網絡。香港正緊密與其他大灣區城市協同合作,共同改善生態環境系統,全面保護區域內國際和國家重要濕地,增強保育效益。

The Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area highlights the conservation and restoration of key ecosystems, and the establishment of ecological corridors and biodiversity protection networks. Leveraging the close cooperation among cities in the Greater Bay Area, Hong Kong is endeavouring to protect wetlands of international and national importance within the region, for enhancing ecosystems and environments in a concerted manner to amplify benefits that arise from nature conservation.

米埔內后海灣拉姆薩爾濕地 Mai Po Inner Deep Bay Ramsar Site





黑臉琵鷺 Black-faced Spoonbill (Platalea minor)







新界北部大片的濕地、林地接壤深圳的紅樹林和森林公園, 是粵港澳大灣區以至中國南部重要的自然景觀及生態資源。 《北部都會區發展策略》在推進城市發展的同時,將積極保護 和修復濕地生境,提升區內整體環境容量和生態功能,並於 港深兩地可持續發展的協同效應下,營造「城市與鄉郊結 合、發展與保育並存」的更優質、宜居生活圈。 The vast stretch of wetlands and woodlands in the northern New Territories abuts mangroves and forest parks at Shenzhen, underpinning natural landscapes and ecological resources invaluable to the Greater Bay Area and the wider Southern China. The Northern Metropolis Development Strategy advocates proactive wetland conservation and restoration in parallel with city development, thereby strengthening the environmental capacity and ecological functions of the northern New Territories. Building upon the strong synergy between Hong Kong and Shenzhen in promoting sustainable development, the Northern Metropolis is positioned to shape a quality living space where "urban-rural" integrates and "development-conservation" co-exists.



#### 區域合作與交流 Regional Cooperation and Exchange

制定相關法例並嚴格執行,是保育瀕危物種的重要一環。特區政府已制定香港法例第586章《保護瀕危動植物物種條例》,以履行《瀕危野生動植物種國際貿易公約》的規定。此外,現有的「中央政府和港澳特區政府《瀕危野生動植物種國際貿易公約》管理機構履約協調會」亦為三地提供了情報互換、技術交流和能力建設的平台,打擊大灣區跨境走私瀕危物種的活動。

Legislation and strict enforcement are important chapters of protecting endangered species. The Protection of Endangered Species of Animals and Plants Ordinance, Cap. 586, is the local legislation that gives effect to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Hong Kong. The existing tri-partite meeting between the Mainland, Hong Kong and Macao CITES Management Authorities also provides a platform for information and technical exchange, as well as capacity building between the three places to crack down on cross-boundary smuggling of endangered species in the Greater Bay Area.

漁護署充公的象牙製品。特區政府已於2018年修訂《保護瀕危動植物物種條例》, 於2021年年底全面禁止古董象牙以外的本地象牙貿易。

Ivory products seized by the AFCD. The Protection of Endangered Species of Animals and Plants Ordinance was amended in 2018 to ban the trade in all ivory, except antique ivory, in Hong Kong by the end of 2021.





穿山甲鱗片用於傳統中藥,是經常被檢獲的瀕危物種標本之一。 Pangolin scales are used in traditional Chinese medicine. They are among the most commonly seized specimens of endangered species. 中華穿山甲屬國家一級保護動物,同時亦是《保護瀕危動植物物種條例》附錄I物種,屬高度瀕危。 Chinese Pangolin *(Manis pentadactyla)* is a national First-class Protected Animal and a highly endangered species listed in Appendix I to the Protection of Endangered Species of Animals and Plants Ordinance.



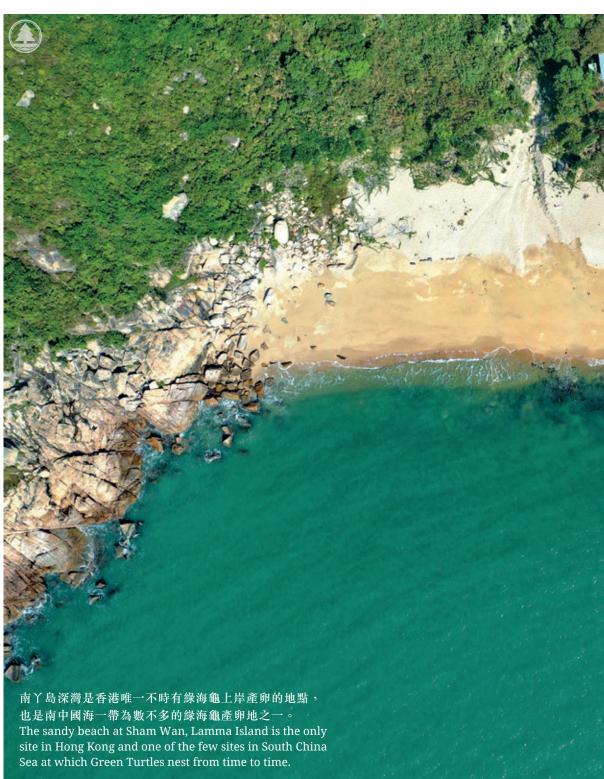
區域合作與交流

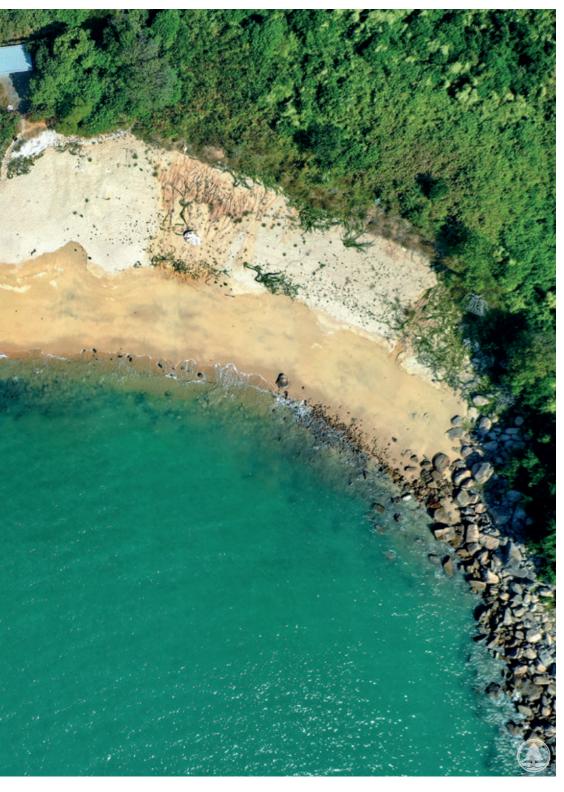
漁護署與廣東省惠東港口海龜國家級自然保護區合作,為保護區內出生或救獲的綠海龜作標誌、衛星追蹤及放流,以研究綠海龜的遷徙路線。

In collaboration between the AFCD and the Guangdong Huidong Gangkou Sea Turtle National Nature Reserve, satellite transmitters were attached to the Green Turtles hatched or rescued in the Nature Reserve to track their migratory movement.











為加強保護綠海龜,深灣限制地區於 2021年4月1日起由沙灘延伸至鄰接的綠海龜繁殖水域(上圖紅線包圍部分),並延長限制期至每年7個月。 To strengthen the protection of Green Turtle (Chelonia mydas), with effect from 1 April 2021, the Sham Wan Restricted Area has been expanded from the beach to the adjacent waters in the bay (area enclosed by red line in above image), and the restricted period has been extended to seven months every year.

香港對瀕危物種綠海龜進行積極的保育工作,包括將深灣 沙灘及鄰接海灣劃為限制地區、清理沙灘和海洋垃圾、安排 定期巡邏,以及教育公眾有關保育海龜的知識。自2000年 起,漁護署開始與廣東省惠東港口海龜國家級自然保護區 交流合作,包括交換資訊、進行科研合作項目及培訓護理人 員等。

Hong Kong makes earnest efforts to protect the endangered Green Turtle (Chelonia mydas) in the territory. Initiatives include designating a Restricted Area covering Sham Wan sandy beach and adjoining waters, beach and marine debris removal, regular patrol and public education on sea turtle conservation. Since 2000, the AFCD has been communicating and working with the Guangdong Huidong Gangkou Sea Turtle National Nature Reserve, exchanging information and conducting joint scientific studies and staff training etc.



除了設立多個海岸公園以保護海豚的棲息地之外,漁護署亦實施香港中華白海豚護理計劃,從多方面推行海豚護理工作,包括管理、公眾教育、研究及跨境合作。漁護署在跨境保育工作上與內地持續合作,包括定期與內地管理當局交流信息,重點討論中華白海豚的保育情況,以及推行跨境教育和宣傳活動,並透過聯合執法行動打擊非法捕撈。

粵港澳海洋生物繪畫比賽 頒獎典禮及得獎作品 Prize presentation ceremony and winning entry of the Guangdong-Hong Kong-Macao Marine Life Drawing Competition





中華白海豚為國家一級保護動物,常見於香港西面大嶼山一帶水域,屬於珠江口中華白海豚族群的一部分。 Chinese White Dolphin (Sousa chinensis) is a national First-class Protected Animal. Commonly found in west Lantau waters, the Chinese White Dolphins in Hong Kong are part of the Pearl River Estuary population.

Along with the designation of marine parks to protect the habitats of Chinese White Dolphin (Sousa chinensis), the AFCD has implemented the Conservation Programme for Chinese White Dolphin covering management, public education, research and cross-boundary cooperation. The AFCD has been cooperating closely with the Mainland on cross-boundary conservation work. This includes regular information exchange with Mainland Authorities, with a focus on the conservation situations of the Chinese White Dolphins, implementation of cross-boundary education and promotional activities, as well as joint law enforcement to combat illegal fishing operations.



大灣區的海洋生物多樣性非常豐富。 The Greater Bay Area is blessed with rich marine biodiversity.





廣東省自2007年起由香港引進珊瑚礁普查,至今已合作超過13年。漁護署、廣東省農業農村廳與廣東海洋大學深圳研究院,每年會互訪及參加粵港珊瑚礁普查活動,以促進粵港雙方的經驗交流和合作。漁護署於2019年更獲邀加入「中國珊瑚保護聯盟」籌備委員會,並成為聯盟副主任委員單位,與多個粵方成員單位共同推動珊瑚保護工作。

Since 2007, Guangdong Province has introduced Reef Check from Hong Kong and has been working with the AFCD over 13 years. To further facilitate the exchange of experiences and cooperation, the AFCD, the Department of Agriculture and Rural Affairs of Guangdong Province and the Guangdong Ocean University Shenzhen Research Institute make mutual visits and participate in reef check activities in Guangdong and Hong Kong every year. In 2019, the AFCD was invited to join the preparatory committee of the China Coral Conservation Alliance and become a deputy director unit of the alliance. The AFCD has engaged with several Guangdong alliance members in jointly promoting coral conservation operations.



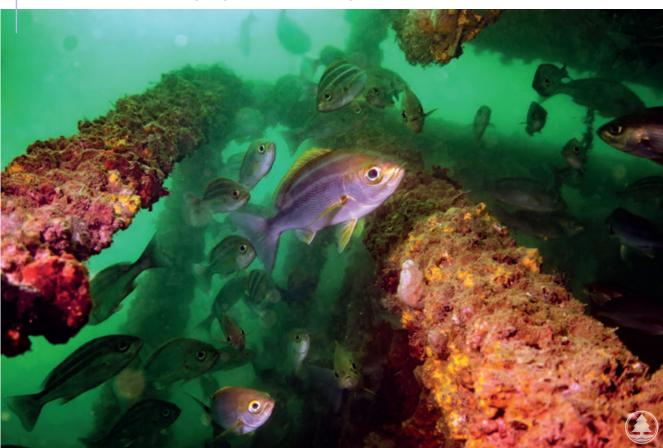






人工魚礁 Artificial reefs

在人工魚礁附近棲息的雞魚群 A shoal of Chicken Grunts (Parapristipoma trilineatum) living near the artificial reefs



人工魚礁可促進各類海洋生物的生長和繁育,為魚類提供食物、庇護和棲身之所。自1996年起,漁護署在海岸公園及重要魚類產卵和育苗場等合適地點放置不同種類的人工魚礁,至今已錄得超過220種魚類在當中覓食、棲息、產卵和繁育。至於在部分魚類養殖區投放的人工魚礁,則可作為生物過濾器,有助改善區內的水質及海床環境。

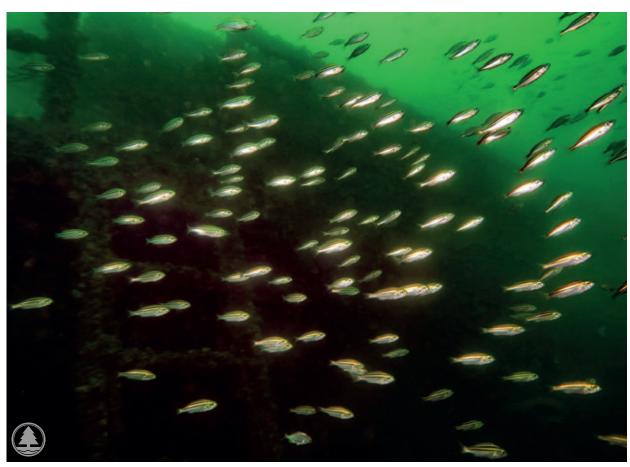
Artificial reefs encourage the growth and propagation of a variety of marine organisms, which in turn provide food, shelter and protection for fish. Since 1996, the AFCD has deployed different types of artificial reefs at suitable sites such as marine parks and important spawning and nursery grounds. Over 220 species of fishes have been recorded using the reefs for feeding, shelter, spawning and nursery areas. The AFCD has also set up artificial reefs in selected fish culture zones as biofilters and as a measure to improve water quality and seabed environment in the area.

漁護署持續與廣東省海洋漁業試驗中心就增殖 放流進行交流,在提升漁業資源方面加強 合作。為響應2019年「全國放魚日」,漁護署 在香港東北水域的人工魚礁進行增殖放流, 共同協力增加大灣區的海洋生物資源。

The AFCD has maintained regular exchange with the Marine Fisheries Development Center of Guangdong Province on fish restocking, and to strengthen collaboration in enhancing fishery resources. In support of the National Fish Release Day 2019, the AFCD rolled out a restocking exercise at artificial reefs in the northeastern waters of Hong Kong to enrich the marine resources of the Greater Bay Area.



在人工魚礁投放的石蚌幼魚 Star Snapper (*Lutjanus stellatus*) fingerlings released in the artificial reefs





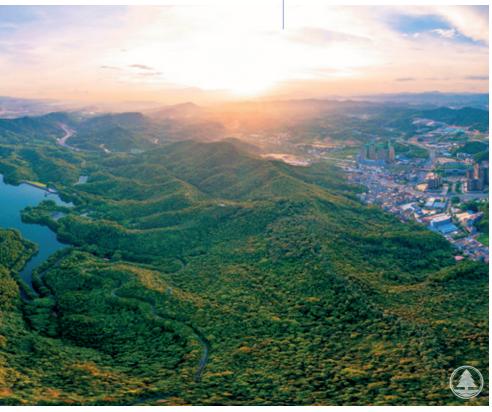


香港 — 馬鞍山郊野公園 Ma On Shan Country Park, Hong Kong



深圳 — 梧桐山國家森林公園 Wutong Mountain National Park, Shenzhen





粤港澳大灣區各地長久以來關係密切,在環保範疇向來有深厚的合作基礎。作為大灣區一分子,香港積極參與區域的合作和交流,將與大灣區城市協同保護瀕危物種,建立生態網絡,改善環境質量。國家積極推動生態文明建設,正為大灣區帶來機遇,促進區內城市以創新協作方式達至可持續發展,共建宜居大灣區,體現人與自然和諧共生。

The long-established, strong bonding between cities in the Greater Bay Area provides a foundation for orchestrating environmental protection in the region. As a member of the Greater Bay Area, Hong Kong is actively engaged in regional cooperation and exchange. Working with other Greater Bay Area cities, we strive to protect endangered species, develop ecological networks and improve the quality of our environment. The nation is embracing ecological civilisation, which has brought opportunities for cooperation and innovation to attain sustainable development. By bonding with nature and each other, we shall thrive and build a liveable Greater Bay Area.





肇慶 — 鼎湖山國家級自然保護區 Dinghu Mountain National Nature Reserve, Zhaoqing

廣州 — 海珠國家濕地公園 Haizhu National Wetland Park, Guangzhou







佛山 — 西樵山國家森林公園 Xiqiao Mountain National Forest Park, Foshan

東莞 — 華陽湖國家濕地公園 Huayang Lake National Wetland Park, Dongguan





江門 — 銀湖灣濕地公園 Yinhuwan Wetland Park, Jiangmen

## 共建宜居大灣區

Building a liveable Greater Bay Area



珠海 Zhuhai



澳門 Macao





中山 Zhongshan

#### 相片提供 Photo credits

馮漢城	FUNG, Hon Shing	Page 52 (bottom right), 68 (top), 69, 81 (top left, bottom left & right), 89 (bottom right), 100 (top left & right)
郭子祈	KWOK, Tsz Ki	Page 2 (top), 34, 52-53 (top), 63 (top right), 64 (top & bottom left), 65 (bottom)
黃遂心	WONG, Daphne	Back cover, Page 57 (left, bottom right), 58 (bottom right), 62 (top & bottom right), 64 (top right), 68 (bottom left), 75, 80 (bottom right), 101 (bottom)
珊瑚學院	Coral Academy	Page 109
	LEUNG, Gary @Gary Studio	Page 110 (top)
	NG, John	Page 109 (bottom left)
建造業零碳天地	CIC-Zero Carbon Park	Page 119
土木工程拓展署	Civil Engineering and Development Department	Page 116, 123
渠務署	Drainage Services Department	Page 120-121
環境保護署	Environmental Protection Department	Page 117 (right, bottom)
	Geocarto International Centre Ltd.	Page 12-15
	Shutterstock	Page 138 (top, bottom right), 139-143

#### 漁農自然護理署 Agriculture, Fisheries and Conservation Department (AFCD)

LI, Choi Chi Amber

吳浩男	NG, Ho Nam Eric	Page 65 (top), 101 (top right)
黃柏樑	WONG, Pak Leung Nelson	Page 2 (centre, left), 27 (top), 28, 30, 35, 52 (bottom left), 55, 56, 57 (top right), 60, 61 (bottom), 66 (top, left), 67 (bottom right), 74, 76, 77 (top right, bottom), 80 (top left & right), 86, 87, 88 (top), 89 (top centre & right), 98 (bottom right), 102 (top & bottom left), 103 (top & bottom right), 146-148
黃韋縉	WONG, Wai Chun Jason	Page 2 (bottom), 54 (bottom right), 77 (top centre), 91

Page 58 (top), 79 (bottom)

#### 「光影・赤灣」攝影比賽

"Light of Tolo Channel and Plover Cove" Photography Competition

	LAU, Tappy	Page 92-93
陳慶忠	CHAN, Hing Chung	Page 2 (right)
黃祺燊	WONG, Kei Sun	Page 98 (top)

#### 香港潛攝大賽 Hong Kong Underwater Photo and Video Competition

鄭敬樂	CHENG, King Lok	Page 46 (top)
鍾倩茹	CHUNG, Sin Yu	Page 48 (top)
何志成	HO, Chi Shing	Page 51 (bottom)
甘靜文	KAM, Ching Man Vania	Page 70 (top left)
姜忠輝	KEUNG, Eric	Page 47, 72 (top left, bottom right), 134 (top left)
劉浩榮	LAU, Ho Wing	Page 49 (top)
劉邦榮	LAU, Pong Wing Atim	Page 96 (top right)
劉日昇	LAU, Yat Sing	Page 73 (top)
李權殷	LEE, Kuen Yan	Page 70 (bottom)
李均康	LEE, Kwan Hong	Page 72 (bottom left)
梁健聰	LEUNG, Kin Chung Kevin	Page 51 (top right, centre), 71 (bottom right)
廖靜嫻	LIU, Ching Han	Page 48 (bottom)
廖睿智	LIU, Yui Chi	Page 72 (top right)
潘耀南	POON, Yiu Nam David	Page 46 (bottom right)
溫尚諭	WAN, Sheung Yue Alan	Page 71 (left), 96 (left)
王漢杰	WONG, Hon Kit Kent	Page 71 (top right)
黃家樂	WONG Ka Lok Caron	Page 52 (bottom centre)
黃增永	WONG, Tsang Wing	Page 70 (top right)
葉勇峰	YEH, Wing Fung	Page 73 (bottom right)
楊婉怡	YEUNG, Kamy	Page 73 (bottom left)
姚景峰	YIU, King Fung Sam	Page 3
袁麗萍	YUEN, Lai Ping Anna	Page 135

#### 清潔灣區我的家 — 粵港澳海洋生物繪畫比賽2018

"The Greater Bay Area Our Elegant Home" Guangdong – Hong Kong – Macao Marine Life Drawing Competition 2018

黃智祺 HUANG, Chi Ki Page 132 (bottom)

李采緻

#### 《連繫•自然 — 探索香港生態之美》

#### Bond with Nature: Exploring Beauty in Hong Kong's Biodiversity

#### 出版 Published by

香港特別行政區政府 環境局及漁農自然護理署

Environment Bureau and Agriculture, Fisheries and Conservation Department, The Government of the Hong Kong Special Administrative Region

#### 中文編輯 Chinese Editor

陳慧聰

CHAN, Wai-chung

#### 英文翻譯 English Translation

達意翻譯服務中心

WORD POWER Language Services Limited

#### 設計 Design

化美設計顧問有限公司

Format Limited

#### 印刷 Printing

香港特別行政區政府 政府物流服務署

Government Logistics Department, The Government of the Hong Kong Special Administrative Region

#### 版次 Edition

2022年6月 第一版

First Edition, June 2022

#### 國際書號 ISBN

978-988-12021-5-4

© 2022 版權所有。所有內容、繪畫及相片之版權由香港特別行政區環境局及漁農自然護理署或個別人士擁有,未經書面同意,不得翻印或轉載任何部分。

© 2022 All rights reserved. No articles, drawings and photographs of this publication may be transmitted, reproduced or reprinted in any form or by any means without prior written permission of the Environment Bureau and Agriculture, Fisheries and Conservation Department, Hong Kong Special Administrative Region or individuals.

