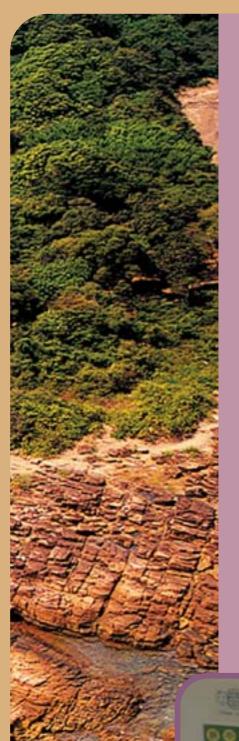
第一章 大事紀要 Chapter 1 Major Events

本年度的大事紀要包括有機耕作轉型計劃、瀕 危物種資源中心啟用、禽流感事件、人工魚礁 計劃、東平洲海岸公園成立和郊野公園節。

Major events in the year include Organic Farming Conversion Scheme, opening of Endangered Species Resource Centre, Avian Influenza Incidents, Artificial Reefs Programme, designation of Tung Ping Chau Marine Park, and Country Parks Festival.



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有機耕作轉型計劃

有機耕作是有利環保的耕種方式,亦是全球農業的新趨勢。本署在二零零零年十二月開始推行有機耕作轉型計劃,為本地菜農帶來新的生產模式之餘,亦為消費者帶來更多新鮮蔬菜選擇。計劃的初步成果令人鼓舞。

位於錦田的兩個蔬菜種植區,被選為首兩個有機轉型區,總面積約為五公頃。年內,參與有機耕作轉型計劃的農民共有15人,他們需依據署方所編訂的「有機作物生產守則」內,有關有機生產、土壤管理、病蟲及雜草防治指引種植蔬菜,每日產量約一噸。每個農場平均種植10種有機菜,常見的有機蔬菜品種包括生菜、白菜、菜心、通菜、莧菜、芥蘭、唐蒿、矮瓜等。

本署定期在大龍實驗農場舉辦講座和田間技術示範,推廣種植有機菜。署方亦為這些轉型農場提供技術支援,以及進行田間檢查,以確保其生產過程符合「有機作物生產守則」的要求。

轉型計劃下所生產的蔬菜由蔬菜統營處 (菜統處) 批銷。分銷到零售點的有機蔬菜,由菜統處特別包裝,並貼有特別標籤,以方便識別。目前售賣這些有機菜的零售點約有30個,包括超級市場、食品店、地鐵內的店舖和菜統處在西貢獅子會自然教育中心的銷售處。

本署認識到須要設定標準和發展認證服務,以助有機耕作的長遠 發展。署方正與學者、農友和業界人士就此進行討論,以推動有 機耕作發展。



漁護者者長陳鎮源 (石) 参観月機耕作展覧具中一値舞位 Director of Agriculture, Fisheries and Conservation Mr Thomas Chan (right) visiting a booth at the Organic Farming Exhibition



有機農友使用棉網,防治狍虱仔侵襲其白菜 An organic farmer uses cotton net to protect his cabbage from flea beetles

ORGANIC FARMING CONVERSION SCHEME

Organic farming, an environmental-friendly farming method, is a rising agricultural trend around the world. The AFCD launched the Organic Farming Conversion Scheme in December 2000 with the aims of providing a new production opportunity for local vegetable farmers, and offering an additional choice of fresh vegetables to local consumers. The initial result is encouraging.

Two vegetables zones, covering a total area of five hectares, in Kam Tin were selected as pilot conversion districts. Fifteen farmers took part in the Organic Farming Conversion Scheme in the year, producing about one tonne of vegetables every day. They have to follow the AFCD Protocol on organic production, soil management, pest and weed control. The farms grow on average 10 crops such as lettuce, white cabbage, flowering cabbage, water spinach, Chinese spinach, Chinese kale, Garland chrysanthemum and egg plant.

Talks and field demonstrations are held at Tai Lung Experimental Station regularly to promote cultivation of organic vegetables. The department also provides technical support and conducts inspections to ensure

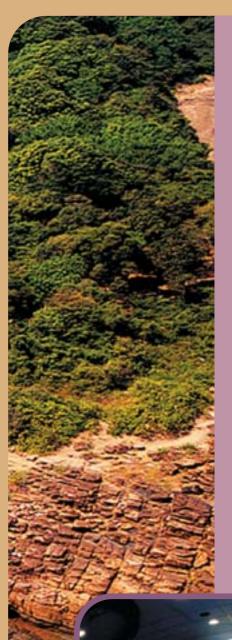
that farmers' production process is in compliance with the Protocol.

Organic vegetables produced under the Organic Farming Conversion Scheme are marketed through the Vegetable Marketing Organisation (VMO). A distinctive label and packing have been introduced for easy identification of the in-conversion produce at retail levels. The VMO markets the organic vegetables to about 30 retail outlets including supermarkets, food shops, MTR shops and VMO's counter at the Lions Nature Education Centre in Sai Kung.

The department recognises the need of setting standards and developing a certification service to facilitate the long-term development of organic farming. Liaison is being made with the academic, farmers and traders to bring the matter

forward.

由菜統處批銷的有機菜, 經特別包裝,並附有標貼 Organic vegetables marketed by the Vegetable Marketing Organisation are specially packed and labelled



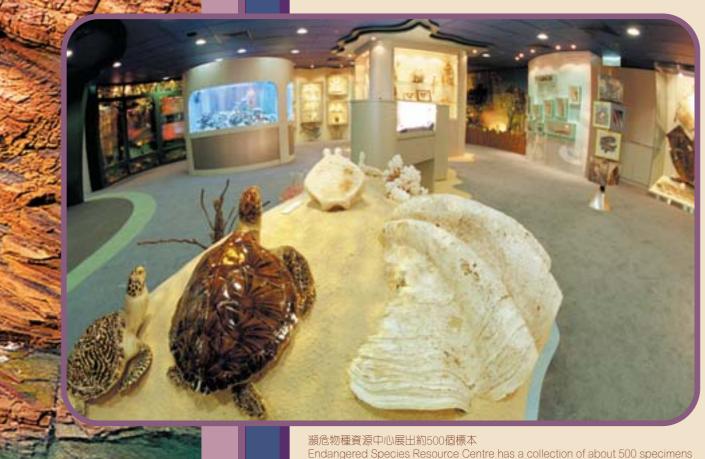
瀕危物種資源中心

瀕危物種資源中心位於長沙灣政府合署六樓漁護署總部,並在 二零零一年五月啟用,以提高公眾保護瀕危物種的意識,並為對 保護瀕危物種有興趣的人士,提供分享及交流意見的地方。

瀕危物種資源中心相信是全球首個同類型的中心,展出約500個標本,所屬的瀕危物種數目超過100種。大部份展品,都是在本港採取執法行動時充公所得,包括來自貓科動物的毛皮,以鱷魚、短吻鱷和蜥蜴製成的皮革物品。訪客更可觸摸展出的皮革樣本,感受真皮革和做製皮革的分別。其他展品包括以原支象牙和海龜甲殼製成的裝飾品,以及犀鳥盔雕刻品。訪客亦可透過放大鏡,察看象牙與長毛象牙標本,及真仿海龜殼的分別。

部份展品具極高存護價值,例如大熊貓毛皮、西藏羚羊皮、西藏 羚羊披肩、犀鳥頸鍊和加工象牙。資源中心亦展示幾類活生的瀕 危物種,如龍吐珠魚、娃娃魚、海南鷯哥、閉殼龜、變色龍與綠 鬣蜥。

年內有超過7 000人士到訪資源中心。中心亦可為預約人士安排 導賞服務。







ENDANGERED SPECIES RESOURCE CENTRE

An Endangered Species Resource Centre, located on the sixth floor of AFCD headquarters at Cheung Sha Wan Government Offices, was opened in May 2001. The Resource Centre serves as a venue for people who are interested in the conservation of endangered species to share experience and exchange views on the issue. It can also help to promote public awareness on endangered species protection.

Probably the first of its kind in the world, the Resource Centre has a collection of about 500 specimens of over 100 endangered species. The majority of the exhibits are confiscated items from law enforcement work undertaken in Hong Kong. These include fur from the big cat family, and leather products made from crocodiles, alligators and lizards.

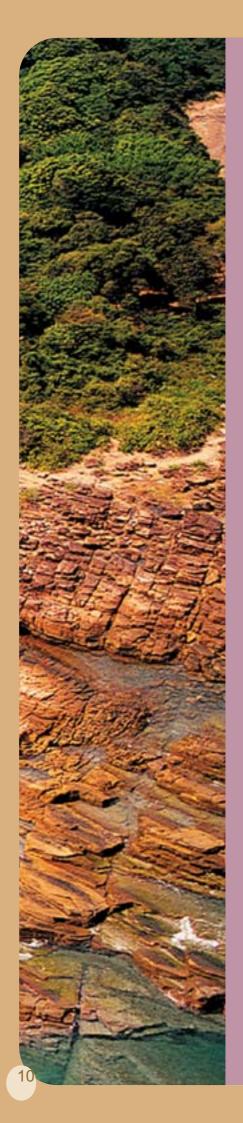
Visitors can touch the skin samples on display to feel the differences between genuine and imitated leather. They can also find ornaments made of ivory tusk, sea turtle shell or hornbill casque and view the differences between elephant ivory and mammoth ivory, and real and imitated sea turtle shells through magnifying glasses.

Some of the exhibits have very high conservation value, such as Giant Panda skin, Tibetan antelope skin, shahtoosh shawl, hornbill necklace and worked ivory. A few live endangered species such as Asiatic bony tongue, Giant Salamanders, hill myna, box turtle, chameleon and iguana are also kept at the Resource Centre.

Over 7 000 people visited the centre in the year. Guided tours can also be arranged by appointment.



訪客透過放大鏡察看象牙與長毛象牙標本 Visitor viewing specimens of elephant ivory and mammoth ivory through magnifying glass



禽流感事件

二零零一年禽流感事件

自一九九七年起,本署一直在雞場及街市,對香港的家禽進行嚴密觀察,檢驗有沒有禽流感病毒。

於二零零一年四月及五月,本署在一些街市的雞籠糞便樣本及死 雞中分離出H5N1病毒。從病毒的基因研究顯示,病毒從多種途徑 入侵,並由水禽中受種後再傳至雞隻。

至五月中,由於街市有大量禽鳥死亡,有需要銷毀所有零售家禽檔位的禽鳥,其檔位須進行消毒及停止營業一個月,以清除病毒。當時本地雞場及批發市場的雞隻雖然沒有受禽流感感染,但是,由於活禽零售市場暫停營業,批發市場及本地雞場沒有渠道銷售雞隻,所以批發市場和雞場適齡應市的雞隻亦須銷毀,約有951 500隻農場禽鳥被銷毀。市場關閉一個月及暫停入口活家禽。

在禽流感爆發後,政府推行新措施,包括規定零售街市進行休 市清潔日。在休市清潔日,街市須出售所有或銷毀餘下家禽, 以便檔位進行徹底清洗及消毒;而零售街市的休市清潔日期亦 與家禽批發市場每月三次休市清潔日的其中一日配合。此外, 因鵪鶉可能帶有的病毒與一九九七年H5N1病毒的源頭有重要關 連,故此立法會通過法例,由生產以至銷售層面,把活鵪鶉與 其他家禽隔離。

AVIAN INFLUENZA INCIDENTS

2001 outbreak

The AFCD has been keeping a very close watch on poultry in Hong Kong since 1997 to check for the presence of avian influenza viruses. This work has been done on farms and in markets.

In April and May 2001, H5N1 virus was isolated from cage swabs and dead birds in a number of retail markets. Genetic studies of the viruses found that multiple incursions of virus had occurred and that the viruses had evolved in waterfowl before crossing to chickens.

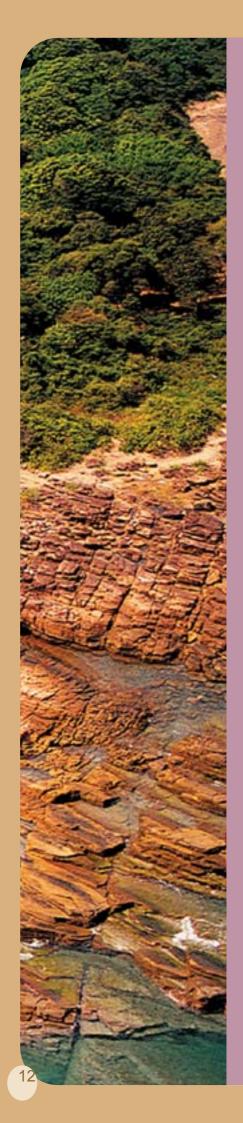
By mid-May, birds died in large numbers in the retail markets, which necessitated all retail poultry market stalls be depopulated, disinfected and closed for one month to eliminate the virus. No infection was detected on local farms or in the wholesale market at that time, but due to the temporary closure of live poultry retail outlets, the outlet for market weight birds in the wholesale market and on local farms was closed, so these birds had to be destroyed. About 951 500 birds were destroyed on farms. Markets remained closed for one month and imports of live poultry were suspended.

New control measures were introduced after this outbreak, including a compulsory retail market rest day. On this rest day, all poultry in retail outlets have to be sold or slaughtered so that the stalls can be thoroughly cleaned and disinfected. This retail market rest day is timed to coincide with one of the three monthly rest days

in the poultry wholesale market. Legislation was also passed to segregate live quail from other poultry at all levels of production and sale, because these birds can carry viruses that are thought to have played a key role in the genesis of the 1997 H5N1 virus.



檢查人員從活雞抽取血液樣本,以作檢驗 Inspection staff taking blood sample from a live chicken for testing



二零零二年禽流感事件

於二零零二年一月十八日,漁護署證實在一月上旬,由零售街市及家禽批發市場收集的樣本,對H5N1病毒呈陽性反應;並發現六種不同的H5N1病毒,由多種途徑入侵市場。

在一月三十一日,漁護署在家禽批發市場進行通宵巡查行動,檢查有沒有染病的死難及追蹤其來源。在是次行動中,本署於錦田一個雞場發現超過300隻雞剛剛死去,署方立刻查封該雞場。隨後數日,在該雞場約100 000隻雞中,估計每日約有10 000隻雞死亡。該雞場所有雞隻於二月二日及三日被銷毀。

在二月四日,另外有三個雞場懷疑感染H5禽流感病毒。這些雞場亦即時被查封及其雞隻被銷毀。本署作出預防措施,至二月五日共有25個雞場被查封。此外,政府又暫停售賣本地家禽,並將二月八日指定為額外的休市清潔日。

是次休市清潔日後,未被查封而又無跡象顯示受感染的雞場,獲准出售雞隻至市場。本署亦對售賣活雞進行嚴密監管。每批出售的雞隻須備有驗血證明書,並必須使用從批發市場取得的清潔塑膠雞籠運載。每架運送禽鳥到市場的車輛,每日只可到一個農場。所有送抵批發市場售賣的雞隻必須受檢驗,並禁止雞農直接售賣雞隻予零售店舖。



恢復入口活雞至長沙灣臨時家禽批發市場 Live chicken import resumes at Cheung Sha Wan Temporary Wholesale Poultry Market

2002 outbreak

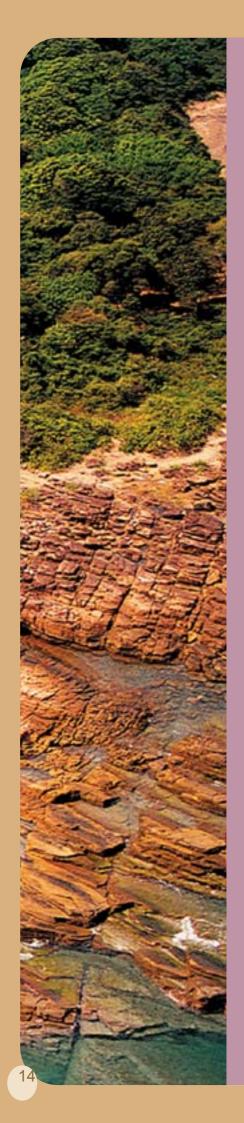
On 18 January 2002, the AFCD confirmed that samples collected earlier that month from retail markets and the poultry wholesale market showed positive signs for H5N1 virus. Six different strains of H5N1 virus were detected, which again indicated multiple incursions of virus.

On 31 January, the AFCD conducted an overnight operation in the poultry wholesale market to identify any infected dead birds and to trace them back to their sources. In the operation, the department found over 300 recently dead chickens on a farm in Kam Tin, which was immediately quarantined. On the following days, an estimated 10 000 chickens were dying per day on this farm out of some 100 000 chickens. The farm was depopulated on 2 and 3 February.

On 4 February, H5 avian influenza was suspected in

three other farms. Again, the farms were immediately quarantined and depopulated. By 5 February, the department had placed 25 farms in quarantine as a precautionary measure. A temporary suspension was placed on the sale of local poultry and an additional market rest day was imposed on 8 February.

After that rest day, chicken farms not under quarantine were allowed to supply birds to market only if there was no evidence of infection on farms. Strict controls were placed on the sale of these birds. All consignments of chickens had to be accompanied by a blood test certificate and transported in plastic transport cages cleaned and obtained only from the wholesale market. The vehicle transporting the birds to market could only visit one farm per day and all consignments of chickens sent to the wholesale market had to be inspected on arrival. Direct sale of poultry from farms to retail outlets was prohibited.



至二月十八日,證實有15個雞場感染H5病毒。另有三個位於錦田被查封的雞場,亦有雞隻懷疑因感染H5N1病毒死亡。因此,所有於錦田區被查封的農場雞隻,均被銷毀。

在二月二十日,白沙區一個農場的雞隻陸續死去。本署即時將該雞場查封,當發現這批死雞對H5病毒呈陽性反應後,隨即於二月二十二日將雞場所有雞隻銷毀。其後本署發現在該雞場500米範圍內,另有三個雞場相繼受病毒感染,這些雞場的雞隻亦被銷毀。同時,本署決定為白沙區其餘21個仍在運作的雞場的活雞進行防疫注射,為期一年,防止禽流感蔓延。

在二零零二年的禽流感事件中,於雞場及街市約有950 000隻雞被銷毀。被銷毀雞隻的雞場在未被徹底清洗及消毒前,不可飼養雞隻。

據對多個H5N1病毒的科學分析顯示,在是次禽流感事件中,最少有七種H5N1禽流感基因型,當中只有三種於本地雞場發現。而這七種基因型,與一九九七年時引致人類嚴重發病的H5N1病毒比較,並沒有相同的內部基因組合。

詳細調查顯示, 二零零二年於本地雞場爆發的禽流感事件, 是由 幾宗病毒進入個別雞場, 再在雞場之間散播所引發的。

是次再度出現H5N1病毒感染事件顯示,此等病毒存在於大自然中,只要有活家禽貿易,感染病毒的風險便仍然存在。

By 18 February, 15 farms had been confirmed infected with H5 virus. In addition, deaths suspected to be due to H5N1 avian influenza were occurring in chickens on three other quarantined farms in Kam Tin. As a result, all quarantined chicken farms in this area were depopulated.

On 20 February, chickens on a farm in Pak Sha were also dying. AFCD staff immediately quarantined this farm and upon finding that the dead chickens were positive for H5 virus, the farm was depopulated on 22 February. Three more farms within 500 metres of this farm were subsequently found to be infected and depopulated. At the same time a decision was made to vaccinate chickens in the remaining 21 active farms in the Pak Sha area for one year as an aid to control the spread of infection.

During the outbreak in 2002, some 950 000 chickens were slaughtered on farms and in markets. Depopulated farms were not allowed to restart their business until they had been thoroughly cleaned and disinfected.

Scientific analysis of the many H5N1 viruses isolated revealed that at least seven different strains of H5N1 influenza virus were present during this outbreak. Of these, only three were detected on local farms. None of these viruses shared the same combination of internal genes found in the 1997 H5N1 virus that caused serious illness in man.

Detailed investigations suggested that the 2002 outbreak of avian influenza on local farms was caused by a small number of introductions of virus onto farms, followed by local spread between farms.

The recurrence of infection with H5N1 virus shows that these viruses exist in nature and the risk of infection will remain as long as there is trade in live poultry.



研究人員將袋裝青□綁在人 工魚礁上 Research assistants binding a pack of shellfish on an artificial reef

人工魚礁計劃

近年,過度捕撈及沿岸發展令本港水域的漁業資源減少,為減低 這些影響,漁護署正實施人工魚礁計劃,以幫助本地漁業可持續 發展和改善近岸地區的海洋環境。

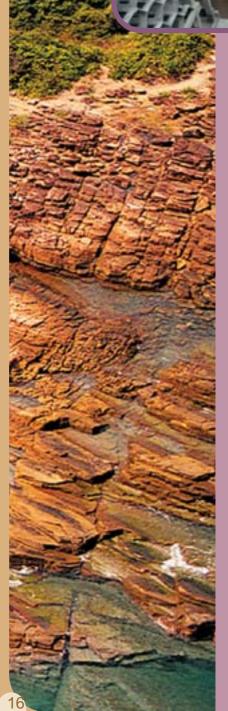
過去數年,本署在三個海岸公園敷設人工魚礁,結果清楚顯示人工魚礁在增加漁業資源方面的成效。人工魚礁四周的生物多樣性及具商業價值魚類的數量,均比在附近的天然岩岸區的高許多。至今在人工魚礁錄得超過180個魚類品種。

署方開始在外牛尾海及大灘海水域敷設人工魚礁,以保護這兩個重要魚類育苗區和增加香港水域的漁業資源。人工魚礁的物料是特別建造的船隻、棄置碼頭和石屎防撞躉。敷設魚礁工程於二零零一年九月展開,預計於二零零三年完成。

生物淨化設施

漁護署正展開為期三年的研究,利用人工魚礁作為生物淨化設施,並養殖青口,以改善養魚區的水質。有關試驗計劃由本署和香港城市大學在西貢滘西魚類養殖區進行,預計於二零零二年在該養殖區放置16個生物淨化設施。

在養魚區放置人工魚礁作為生物淨化設施,藉以改善區內的海水情況,是一個具成本效益的方法。特設的生物淨化設施,為濾食性海洋生物,例如青口,提供棲身之所,這些附生生物會加速清除養魚區的有機廢物和懸浮微粒。



青口有助改善養魚區水質 Shellfish help to improve water quality in fish culture zones

ARTIFICIAL REEFS PROGRAMME

In recent years, overfishing and coastal developments have resulted in a decline in fisheries resources in Hong Kong waters. To minimise these impacts, the artificial reefs programme is being implemented to help improve the sustainability of local fisheries and Hong Kong's inshore marine environment.

Artificial reefs have proven to be an effective resource enhancement device as evident in the deployment of artificial reefs in three marine parks in the past few years. Bio-diversity and abundance of commercial fishes found around the artificial reefs are much higher than those observed in nearby natural rocky shore areas. Over 180 fish species have so far been recorded at artificial reef sites.

The AFCD has started to deploy artificial reefs at Outer Port Shelter and Long Harbour to help protect these important nursery areas and enhance fisheries resources. Custom-built boats, redundant piers and concrete fenders are used in building the artificial reefs. The deployment work started in September in 2001 and is scheduled to complete in 2003.



Biofilter project

A three-year study is being conducted by the AFCD in using artificial reefs, as biofilters, and edible shellfish to improve water quality in fish culture zones. The study, undertaken jointly with the City University of Hong Kong, will be conducted in Kau Sai Fish Culture Zone in Sai Kung. Sixteen biofilter units will be deployed there in 2002.

The use of artificial reefs as biofilters is a cost-effective approach to improve the marine environment in fish culture zones. The specially designed biofilters provide support facilities for intensive culture of filter feeding organisms such as edible shellfish. These filter feeding organisms and cultured shellfish help to remove organic wastes and suspended particles from the fish culture zones.

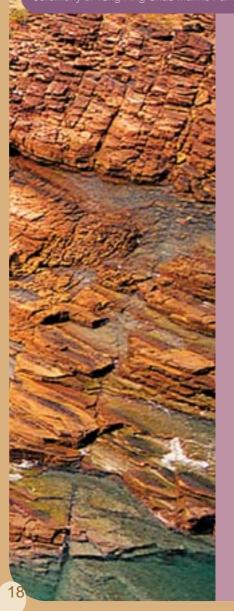


附有青口的人工魚礁安放在魚排旁的水域 An artificial reef with shellfish being unloaded beside a fish raft



介紹更樓石特色的資料版 Information plate highlighting features of Kang Lau Shek

Non-official member of Executive Council
Mr Leung Chun-ying officiating at the opening
ceremony of Tung Ping Chau Marine Park



東平洲海岸公園

東平洲是位於香港東北隅的小島,沿岸未受發展影響,故水質良好,近岸地方有不同種類的海洋生物。小島東面有面積達1.8平方公里的珊瑚群落,是本港最大的珊瑚區之一。

東平洲水域在二零零一年十一月十六日被劃為海岸公園,公園面積270公頃,是本港第四個海岸公園。

該海岸公園的管理模式與其他海岸公園相似,唯一不同之處是在東北沿海地區設立了兩個核心區,該兩個核心區的石珊瑚覆蓋率甚高,並有多種海洋生物,包括魚類如蝴蝶魚、雀鯛和石斑,以及無脊椎動物如海膽、海參和寶貝。設立核心區的目的,是要保護該區的海洋環境和生態系統,公眾亦可藉潛水等活動欣賞區內的海洋生態。

本署可根據條例發捕魚許可證予真正的漁民及村民,但所有人士包括持證人都嚴禁在兩個核心區捕魚。

漁護署又在東平洲的南面和北面海岸劃定兩個康樂釣魚區,公眾可於該區以一絲一鈎方式垂釣。這兩個釣魚區以試驗性質推行一年,並由本署密切監察有關情況,再作檢討。

東平洲東岸的地貌 Geographical features on east coast of Tung Ping Chau

TUNG PING CHAU MARINE PARK

Tung Ping Chau is a small island located at the northeastern corner of Hong Kong. The water quality around the island is pristine with highly diverse assemblages of marine lives. The fringing corals found on the eastern side of the island, covering an area of 1.8 square kilometres, is among the largest in Hong Kong.

The waters around Tung Ping Chau was designated as the Tung Ping Chau Marine Park on 16 November 2001. With a sea area of 270 hectares, it is the fourth marine park in Hong Kong.

The management of this marine park is similar to other marine parks except that two core areas have been established at the northeastern coast of the island. They cover the part of the coastal area with the highest coverage of stony corals and a diverse assemblage of marine lives. These include fishes like butterfly fish,

damsel fish, groupers, and other invertebrates like sea urchin, sea cucumbers and cowries. The objectives of establishing the core areas are to provide better protection to the marine environment and the ecological systems there, and to allow opportunities for appreciation by the public through activities like diving.

The AFCD may, according to Regulation, issue fishing permits to bona fide fishermen or villagers. However, fishing activities are forbidden within the two core areas even for permit holders.

Recreational fishing on a one-line-one-hook basis, however, is allowed in two recreational zones established on the northern and southern coast of the island. The two zones are set up on trial for one year and are closely monitored by the department before a review is conducted.



東平洲岸邊的珊瑚群落 Fringing corals off Tung Ping Chau





COUNTRY PARKS FESTIVAL

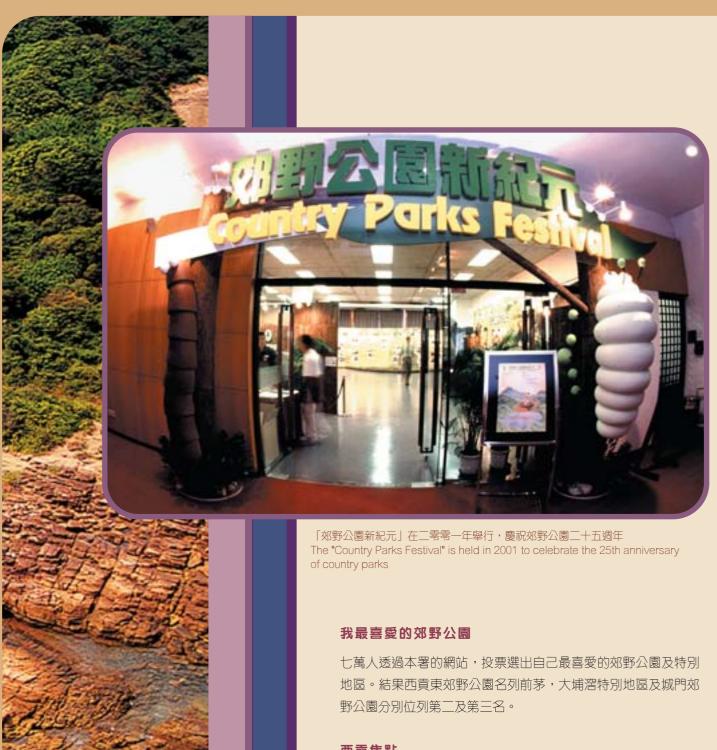
The AFCD launched the "Country Parks Festival" from November 2001 to March 2002 to celebrate the 25th anniversary of the establishment of Country Parks. The campaign aimed to publicise the development of country parks in the last 25 years, and to promote the images and wider use of different country parks.

Country Parks Exhibition

The exhibition was held at the City Hall from 6 to 11 November, 2001. It highlighted the value of country parks in three sections. The "Historical Review" section focused on the history and development of country parks in the past 25 years, using interesting stories, objects, places and people in country parks. Lots of old photographs, publications, documents, plaques and records were displayed. Under the "New Faces" section, the present situation of country parks was highlighted through photographs, models, books and publications. New uniform of park wardens, new country parks education programmes and nature centres were also shown. The section on "Future Perspective" examined the future plan, direction, objectives and functionality of country parks. The value of country parks for the present and future generations was also presented.



前行政會議成員王募鳴(右二)在前漁護署署長韋徐潔儀(右)陪同下,參觀郊野公園展覽 Former Executive Council member Ms Rosanna Wong (second from right), accompanied by former Director of Agriculture, Fisheries and Conservation Mrs Lessie Wei (right), visiting the Country Parks Exhibition



西貢焦點

為慶祝郊野公園節,本署於二零零一年十二月舉行一連串與西貢 有關的活動,包括在西貢郊野公園舉行的國際健行日、遊覽西貢 郊野公園及紅樹林的導賞團、西貢攝影比賽及展覽,為中學教師 舉辦的西貢海岸遊覽團,以及與香港醫學會和香港童軍總會合辦 的遠足安全講座。

My Favourite Country Park

Some 70 000 persons cast their votes in selecting their favourite country park and special area on the AFCD website. Sai Kung East Country Park came first in the voting, followed by Tai Po Kau Special Area and Shing Mun Country Park.

Sai Kung in Focus

A series of events focusing on Sai Kung were held in December 2001 to celebrate the Country Parks Festival. These included the International Hiking Days at Sai Kung Country Parks, guided tours to Sai Kung Country Parks and mangroves, a photo contest and an exhibition on Sai Kung, Sai Kung coastline excursion for secondary school teachers, and hiking safety seminars organised jointly with the Hong Kong Medical Association and the Scout Association of Hong Kong.

兒童觀看郊野公園的寶物 Children finding out the treasures in country parks