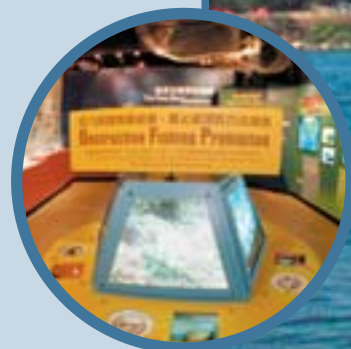


第三章 漁業 Chapter 3 Fisheries

漁業提供穩定鮮魚供應給本地市場，對香港貢獻很大。在二零零一年，捕撈漁業及海魚養殖業的產量約等於本港海鮮食用量的31%，而塘魚養殖業的產量則約佔淡水魚食用量的6%。

The fisheries industry contributes greatly to Hong Kong through a steady supply of fresh fish to the local market. In 2001, the capture and mariculture fisheries constituted about 31 per cent of seafood consumed in Hong Kong. On the other hand, pond fish farms produced about six per cent of freshwater fish consumption.



漁業概況

漁業提供穩定鮮魚供應給本地市場，對香港貢獻很大。在二零零一年，捕撈漁業及海魚養殖業的產量約等於本港海鮮食用量的31%，而塘魚養殖業的產量則約佔淡水魚食用量的6%。

本港有超過5 100艘漁船，漁民約11 560人，佔總勞動人口的0.36%。捕魚方法主要有拖網、延繩釣、手釣、刺網和圍網，其中以拖網捕魚的收成佔總漁獲量的最大部分。各種漁船的數目載於附錄4。在二零零一年，捕撈漁業約九成的漁獲來自香港以外水域，生產量估計達174 000公噸，其中約97 000公噸作本地市場之用。

海魚養殖在風浪較少的海岸區進行，以浮排懸掛的網箱養殖海魚。本港現有26個養魚區(附錄5)，面積共209公頃，持牌的海魚養殖者約1 370名。大部分養殖場以小規模家庭式經營，平均面積約240平方米。二零零一年的生產量估計為2 470公噸，約為本地鮮活海魚食用量的13%。

內陸魚塘主要位於新界西北部，佔地1 059公頃，二零零一年產量達2 550公噸。大部分魚塘採用混合養殖法，養殖的魚類品種多數以鯉魚科混合福壽魚或烏頭，其餘魚塘則採用單養式養殖法，飼養生魚或塘虱。為增加收入，有些沿岸的魚塘已改為以單養式養殖半鹹淡水魚類，例如金鼓、魮魚、黃臘鰱等。



東星斑
Coral trout



紅蟹
Red crab



蝦拖
Shrimp trawler

STATE OF FISHERIES INDUSTRY

The fisheries industry contributes greatly to Hong Kong through a steady supply of fresh fish to the local market. In 2001, the capture and mariculture fisheries constituted about 31 per cent of seafood consumed in Hong Kong. On the other hand, pond fish farms produced about six per cent of freshwater fish consumption.

The capture fishing industry comprises more than 5 100 fishing vessels and about 11 560 fishermen, representing 0.36 per cent of the territory's total work force. The main fishing methods are trawling, long-lining, hand-lining, gill-netting and purse-seining with most of the total catch obtained through trawling. The number of fishing vessels by type is shown in Appendix 4. The industry harvests about 90 per cent of its catch from waters outside Hong Kong. In 2001, the industry produced an estimated 174 000 tonnes of fish products. About 97 000 tonnes were consumed in Hong Kong.

Marine fish culture involves rearing marine fish in cages suspended by floating rafts in sheltered coastal areas. There are 26 fish culture zones (Appendix 5) occupying a sea area of 209 hectares with about 1 370 licensed operators. Most licensed operations are small and family-based, with farm size averaging about 240 square metres. Production in 2001 was an estimated 2 470 tonnes, or about 13 per cent of the locally consumed live marine fish.

Most inland ponds are located in northwest New Territories. These ponds, covering 1 059 hectares, produced 2 550 tonnes of freshwater fish in 2001. Most ponds practise polyculture of carps mixed with tilapia or grey mullet. The remaining ponds carry out monoculture of snakehead or catfish. However, many coastal ponds are converted to monoculture of brackish species such as scat, seabream and pampango to reap better profit.



漁護署人員投放魚苗
AFCD staff releasing fish fingerlings

漁業分署工作

- 向漁民及養魚戶提供財政及技術支援，以推廣漁業發展；
- 執行法例，規管漁業；
- 策劃及執行漁業資源存護計劃，包括人工魚礁計劃；及
- 技術及行政上支援魚類統營處。

投放魚苗

世界多處地方均以投放魚苗提高及改善漁業資源，這亦是最受漁民歡迎的漁業管理措施。

漁護署在二零零一年十月，在印洲塘和海上灣海岸公園試驗放養魚苗，投放青斑和紅魚的魚苗分別為12 000尾和19 000尾。本署希望藉試驗所收集的資料，評估在本港水域實施放養魚苗的成本效益和可行性。

為方便監察有關試驗計劃，署方為魚苗植入標籤，定期進行水底監察，為期一年。本署並會評估投放的魚種，對增加本地漁業資源的成效，以及對天然生長魚類和生態系統的影響。

WORK OF FISHERIES BRANCH

- To provide financial and technical support to fishermen and fish farmers for promoting the development of the fisheries industry;
- To enforce legislation to regulate and manage the fisheries industry;
- To plan and implement projects for the conservation of fisheries resources, including the Artificial Reefs Programme; and
- To provide technical and administrative support to the Fish Marketing Organisation.



魚苗植入標
籤以便進行水
底監察
Fingerlings are
tagged for
underwater observation

RELEASE OF FISH FINGERLINGS

Releasing fish fingerlings to enhance and restore fisheries resources has been practised in many parts of the world. It is also a fisheries management measure most acceptable to fishermen.

Some 12 000 green groupers and 19 000 red snapper fingerlings were released by the department in Yan Chau Tong and Hoi Ha Wan Marine Parks in October 2001 to assess the cost-effectiveness and suitability of adopting fish fingerlings release as a fisheries resource enhancement measure in Hong Kong waters.

To facilitate monitoring work, the fingerlings were tagged with underwater observation being conducted at regular intervals for one year. The AFCD would also assess the effect of selected species in enhancing the local fisheries resources and its impact on wild stock and the ecosystem.



投放的紅魚
Released red snapper



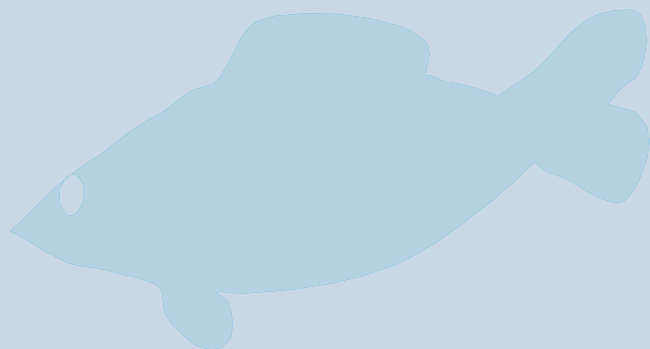
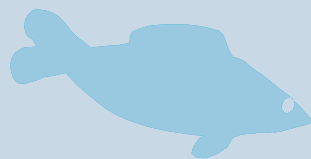
水產養殖

紅潮監測措施

紅潮 (或有害藻華) 及水質會大大影響本港養殖海魚的產量。根據浮游植物監測計劃，漁業分署人員每周於11個養魚區及每兩周於五個離岸監測站採集海水樣本，以偵察有害藻類品種及紅潮的形成。

年內，在香港水域共錄得36宗紅潮，當中有兩宗發生在養魚區的紅潮是由有害藻類造成。署方及早通知養魚戶採取防範措施，將魚排遷離受紅潮影響水域，個別魚場只有少量較為敏感的養殖海魚死亡。至於其餘18宗在養魚區附近發生的紅潮，署方亦已通知養魚戶，預防魚排可能出現海水缺氧現象。

為加強監察紅潮的能力和效率，本署在二零零一年五月採用一套電腦系統，以地理訊息系統技術，展示紅潮出現的海域及時間分佈，並迅速分析其可能移動方向，以提供更精確的預早警報。這系統有助分析紅潮的發生與不同環境因素的相互關係，從而加深了解紅潮的成因。此外，透過這套系統，市民亦可在本署網址瀏覽及找尋最近香港水域發生紅潮的地點。



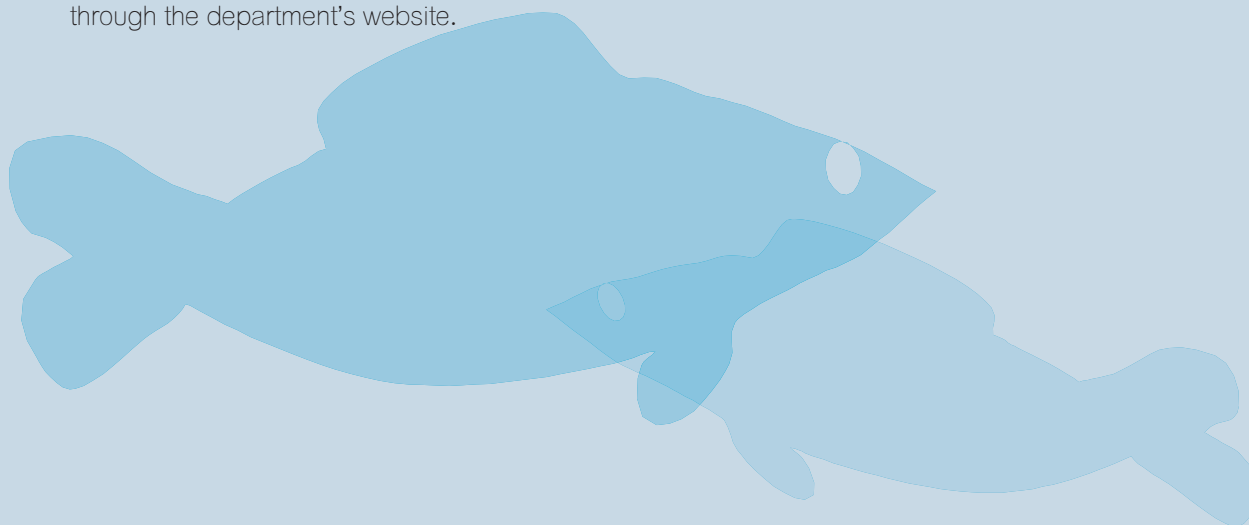
AQUACULTURE

Red tide monitoring

Red tide (or harmful algal bloom) and water quality have great impacts on the mariculture operations in Hong Kong. Under the current phytoplankton monitoring programme, water samples are taken every week from 11 fish culture zones and five off-shore stations bi-weekly to detect harmful algal species and development of red tides.

During the year, 36 red tide incidents were recorded in Hong Kong waters. Two red tides which occurred at fish culture zones were caused by harmful algae. Fish farmers were alerted and took precautionary measures by relocating the fish rafts out of the red tide affected area. Only a few cultured fish more sensitive to the harmful algae were killed in isolated fish farms. In another 18 incidents which occurred near fish culture zones, fish farmers were advised to guard against oxygen depletion.

To enhance the capability and efficiency in red tide monitoring, a computerised system was installed in May 2001. Using Geographic Information System (GIS) technology, the department can detect the spatial and temporal distribution of red tides and quickly analyse their possible movement for accurate early warning. In addition, the system can analyse red tide occurrence against different environmental parameters, resulting in better understanding of the causes of red tides. Also, this system enables the public to browse and search interactively the locations of recent red tide incidents in Hong Kong waters through the department's website.



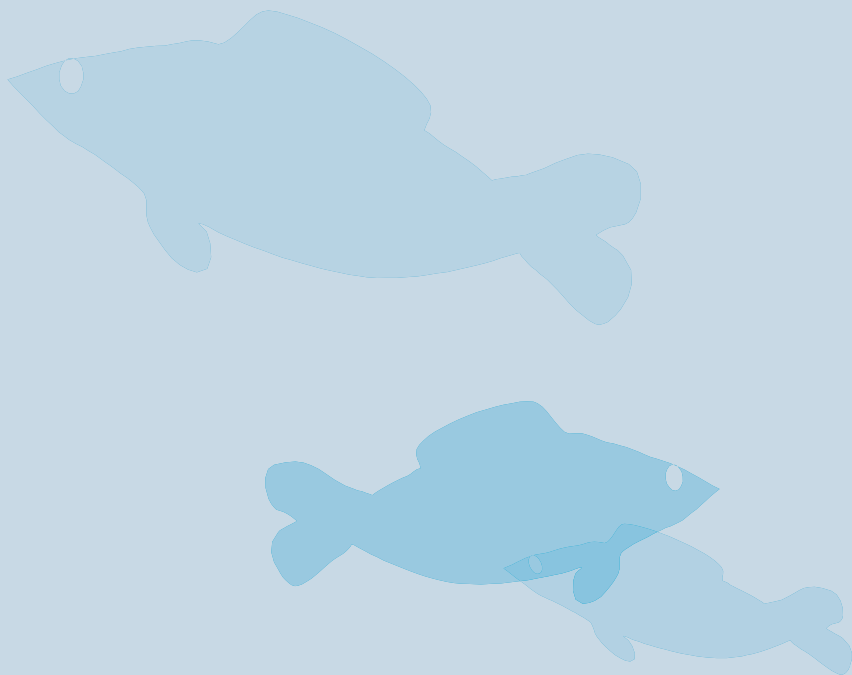


魚類健康檢查計劃及推廣活動

魚病是養魚戶經常面對的難題。本署會應養魚戶的要求，協助診斷病理及建議合適的防治措施。香港的魚病主要由病原細菌或寄生原蟲引起，亦與養殖場的水質及飼養操作方法有關。署方又推行魚類健康檢查計劃，探訪魚場，以便及早發現魚病，及向養魚戶示範良好飼養方法和魚病預防措施。此外，本署更印製一份月曆分發給養魚戶，月曆載有海水缺氧的高危時期，提醒養魚戶於有需要時在魚排進行打氣，減低缺氧的問題。

有潛質可供養殖的新品種

為了向養魚戶提供更多養殖品種，以及提高競爭力，本署致力試驗養殖具良好市場潛力的新品種，推介給養魚戶。初步試養顯示，老鼠斑極具在香港養殖的潛質，其幼魚在網箱養殖環境下生長良好，本署已開始進一步實驗，研究增加老鼠斑抵禦寒冬的能力。



Fish Health Inspection and Promotion

Fish disease has been a difficult problem faced by fish farmers. The AFCD provides assistance in disease diagnosis and advice on treatment measures upon request. In Hong Kong, fish disease outbreaks are mainly caused by pathogenic bacteria or parasitic protozoa as well as problems related to water quality and husbandry practice of fish farms. Under the Fish Health Inspection Programme, fish farms are visited to facilitate early detection of disease outbreaks and to advise fish farmers on good husbandry techniques and disease prevention measures. A mariculturist calendar was prepared and distributed to all mariculturists to remind them to carry out aeration during the period prone to oxygen depletion.

Potential New Species for Culture

To provide more species for culture and to increase competitiveness, suitable new species with good market potential are identified for promotion to farmers. Humpback grouper is found to have a good potential for culture in Hong Kong. The fingerlings grow well in the cage culture environment. Further studies are being conducted to enhance the survival of humpback grouper during winters.



本署試驗養殖龍躑，以推介給養魚戶
Culture trial of giant grouper for introduction to mariculturists



香港漁業概況展覽
Exhibition featuring Hong Kong's fisheries industry

發展遠洋漁業的可行性研究

鑑於傳統漁場的漁業資源日少，越來越多漁民欲前往更遠的水域作業，署方委託顧問進行研究，探討香港發展遠洋漁業在技術和財政方面的可行性。預計研究在二零零二年九月完成。

支援及推廣

政府為漁民和養魚戶提供財政援助及技術支援。本署共管理五個漁業貸款基金，分別為魚類統營處貸款基金、漁業發展貸款基金、嘉道理農業輔助貸款基金、世界難民年貸款基金和美國經援協會貸款基金。

內地漁業當局在本年六月及七月再次在南海實施休漁期，以存護漁業資源，約1 400艘香港漁船受休漁措施影響。為了幫助受休漁期影響的漁民解決困難，本署動用魚類統營處貸款基金，提供每宗三萬元的特別貸款。年內，合共批出263宗貸款，總額為787萬元。在休漁期內，署方與內地機構合辦以內地漁業管理措施為題的研討會，又為漁民開辦在職訓練課程，協助他們提升操作漁船的技能，以及對漁業管理和存護的認識。

為了確保避風塘的安全及秩序，海事處、警務處和消防處實施特別泊船安排，並且加派人手巡邏，以及加強防火和防止罪案的宣傳。

在「內地過港漁工計劃」下，約4 180名漁工配額獲分配予約1 140名合資格的漁船及收魚船經營者，以紓緩該行業人手不足的情況。

STUDY ON OFFSHORE FISHING

As fisheries resources in traditional fishing grounds have been on the decline and more fishermen wish to go fishing in more distant waters, the AFCD has commissioned a consultancy study to look into the technical and financial feasibility of developing an offshore fishing industry. The study is expected to complete by September 2002.

SUPPORT AND EXTENSION

Financial assistance and technical support are provided to fishermen and fish farmers. Loans are available from the five fisheries loan funds, namely the Fish Marketing Organisation Loan Fund, the Fisheries Development Loan Fund, the Kadoorie Agricultural Aid Loan Fund, the World Refugee Year Loan Fund and the Co-operative for American Relief Everywhere Loan Fund.

Mainland fisheries authorities implemented the fishing moratorium in the South China Sea in June and July this year again to conserve fisheries resources, affecting about 1 400 Hong Kong fishing vessels. To help relieve fishermen's hardship as a result of the fishing moratorium, special loans of \$30,000 each were made available under the Fish Marketing Organisation Loan Fund. A total of 263 loans amounting to \$7.87 million were made this year. During the fishing moratorium, the department worked with mainland authorities to organise seminars on the mainland's fisheries management measures, and arranged vocational training classes for raising fishermen's awareness in fisheries management and conservation, and for upgrading their skills in vessel operation.

The Marine Department, Hong Kong Police and Fire Services Department implemented special berthing arrangements, strengthened patrols and enhanced publicity to ensure safety and order in typhoon shelters.

Some 4 180 deckhand permits were issued under the Mainland Fishermen Deckhands Scheme to about 1 140 eligible operators of fishing and fish transportation vessels to alleviate their manpower shortage.



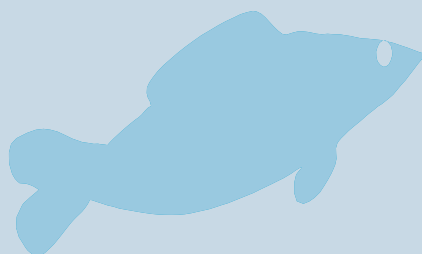
漁業教育活動

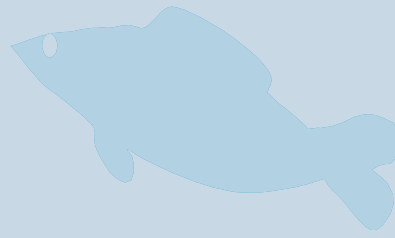
香港魚網

為提高市民對香港漁業資源的認識，以及加強有關存護此等資源的教育工作，本署推出「香港魚網」網站(www.hk-fish.net/)，介紹不同種類的本地漁船、香港主要食用海產的種類及珊瑚魚貿易。網站內的「香港海水魚資料庫」，更是首個搜羅多達1 000種香港海魚相片及相關科學資料的知識寶庫。

海魚畫曆

該手繪海魚畫曆印有52種海魚的彩色圖片及簡介，在一年52個星期，透過「每周一魚」的概念，提高市民對存護漁業資源的意識。





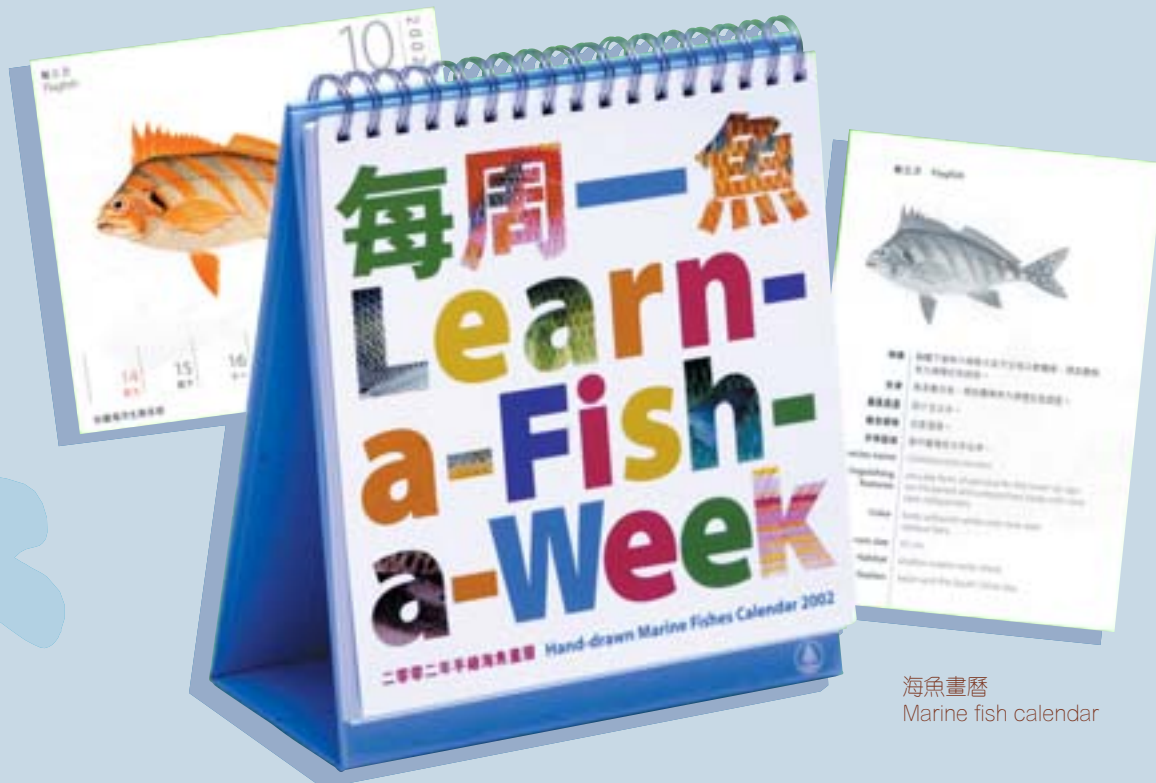
FISHERIES EDUCATIONAL ACTIVITIES

Hong Kong Fish Net

The department has launched a website, the Hong Kong Fish Net (www.hk-fish.net/), with an aim to raising public awareness on the fisheries resources in Hong Kong and the need of conserving these resources. The website covers topics including different types of local fishing vessels, common species of live seafood consumed in Hong Kong and coral reef fish trade. It also contains the "Hong Kong Marine Fish Database" which is the first database with photos and scientific information of over 1 000 marine fishes in Hong Kong.

Marine Fish Calendar

This hand-drawn marine fish calendar aims to enhance public awareness on conserving fisheries resources through the concept of "Learn-a-Fish-a-Week". Fifty-two marine fishes in colourful pictures and simple description are featured in the 52 weeks in the year.



海魚畫曆
Marine fish calendar