

# 可持續校園 Sustainable Campus

二零零八年夏•秋 Summer • Autumn 2008

# 以樹為寶,以樹為豪

Trees Our Asset, Trees Our Pride



為校園樹木編戶籍 Plotting a Habitat Map for Our Campus

木是校園的瑰寶,我們多麼幸運,能夠擁有不少。但 究竟有多少?

在校園景觀美化委員會的指導下,物業管理處大約兩年前展開 一項樹木調查,量度並評估胸徑五百毫米或以上的樹木,然後 把數據連同視象和生長位置圖,一併輸入ArborTrack — 一套 英國製的精密電腦化數據庫系統。

調查在今年初完成。現在,只要點擊數下,就可在電腦見到校 **園不同地區的地圖,上面滿布圓圈,每一圓圈代表一株樹。再** 點擊一下,還可見到樹木的特寫圖片和詳細資料。數據庫還儲 存了樹木保養的資料,包括每三年更新一次的樹體測量,以及 每一至兩年評估一次的樹木狀況。



。該樹位於逸夫校園,屬稀有珍貴

Above: Data of a Green Ailantus (Ailanthus fordii) retrieved from the database, a rare and precious species found on Shaw campus.

左圖:崇基校園的吊芙蓉 (佐治強先生慨允刊登) Left: A Scarlet Dombeya (Dombeya wallichii Benth. & Hook. f.) on Chung Chi campus (Courtesy of Mr. George Jor)

數據庫內現錄有四百七十五棵樹,包括稀有和珍貴的品種,以 及對中大有歷史價值的樹木。物業管理處現正把寫有中文和拉 丁文樹種名稱的標籤掛在樹幹上,預期今年底完成。

樹木調查是樹木保養政策的一部分,該政策旨在保護和保 育校園內的樹木(www.cuhk.edu.hk/greencampus/en/policy/ tree.htm)。關於政策的實施,由協理副校長許敬文教授統領 的校園景觀美化委員會作出決定。該會的成員還包括一名副校 長、一名書院院長、來自中大的景觀與植物學專家、物業管理 處的代表、三名校外成員和兩名中大學生。

Under the direction of the Campus Landscaping Enhancement

blessed with quite a few of them. But how many?

rees are the gems of our campus and we are obviously

Committee (CLEC), the Estate Management Office (EMO) began conducting a tree survey about two years ago. Trees with a diameter of at least 500 mm were measured and assessed. Then the data together with their visual image and the maps of their locations were inputted into ArborTrack, a sophisticated computerized database system made in the UK.

The survey was completed early this year. Now maps of different areas on campus with circles for trees can be retrieved from the database with a few clicks of the mouse. One more click would reveal a close-up and details of the tree. The database also contains information on tree maintenance. The trees' physical measurements are updated every three years and assessments of their conditions, every one to two years.

There are 475 trees in the database, including rare and precious species and trees of historical value to CUHK. The EMO is in the process of hanging labels with name of species in Chinese and Latin, on the trees. This is expected to finish by the end of this year.

The tree survey is part of the tree preservation policy which exists to protect and conserve trees on campus (www.cuhk.edu.hk/greencampus/ en/policy/tree.htm). Decisions regarding implementation are carried out by the CLEC. Headed by Prof. Michael Hui, Associate Pro-Vice-Chancellor, its membership includes a Pro-Vice-Chancellor, a College Head, specialists in landscaping and botany from CUHK, EMO representatives, three external members, and two students of the University. \*

(接下頁 To be continued)

麗萍女士是校園景觀美化委員會的校外成員,從孩提時代 起,即與植物為伴,緊密相隨。她在山間散步時,會大啖 崗棯莓:晚上又會睡在散發天然幽香的油柑子葉枕頭上。她自小 便冀盼當樹木的代言人,「所有生物都有生存的權利。植物不能 説話,我要為她們發言。」目前,她是世界自然保護聯盟物種生 存委員會中國植物專家小組的成員。

「人們看一所大學時,首先是看大學的校園。校園最先反映大學的內涵,因此中大詳錄校內的樹木是至為重要的。中大有全面的植樹政策,這是關健的第一步。藉着進一步調校和定期檢討政策,我盼望中大成為香港、甚至是中國大陸的模範。」

校園景觀美化委員會的另外兩名校外成員,是香港園景師學會的 向偉健先生和香港園藝學會的張耀輝先生。學生成員是生物系的 陳雋浩先生和建築系的尹麗瑩女士。

## 植物不能說話,我要為她們發言 Plants Can't Talk, So I Will Speak for Them



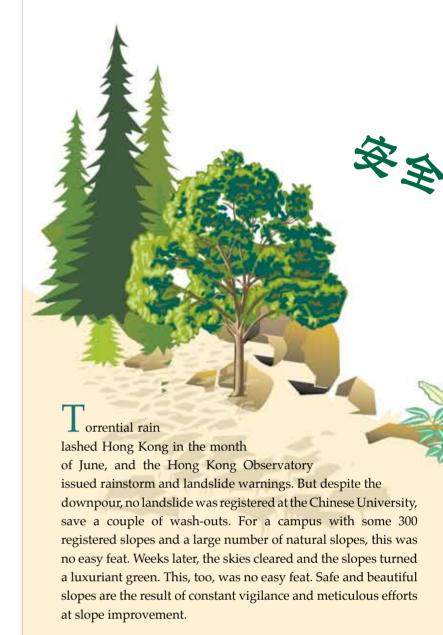
蕭女士在海南的一個森林進行植物調查 Ms. Siu in a forest during a plant survey in Hainan

s. Gloria Siu, one of the external members of the CLEC, has had a long and close relationship with plants that began in childhood when she gorged on Rose Myrtle berries during walks in the hills and slept on pillows stuffed with fragrant Myrobalan leaves. 'All living things have the right to live. Plants can't talk, so I will speak for them,' she had thought growing up. Today she is a member of the China Plant Specialist Group, Species Survival Commission, World Conservation Union.

'When people look at a university, the first thing they see is the campus. It is the earliest reflection of its substance. Therefore it is of critical importance that CUHK takes inventory of its trees. The University has a comprehensive tree policy. This is an important first step. I would like to see CUHK become, with further finetuning and regular review of its policy, a model for Hong Kong or even China.'

The other two external members of the CLEC are Mr. Heung Waikin from the Hong Kong Institute of Landscape Architects, and Mr. Cheung Yiu-fai from the Institute of Horticulture (Hong Kong). The student members are Mr. Chan Chun-ho (Biology) and Ms. Wan Lai-ying Samantha (Architecture). \*\*

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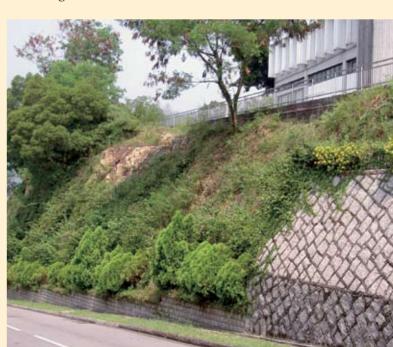


### **Safety and More**

In 1997, weeks of heavy rain triggered major landslides on our campus. But the number started steadily decreasing shortly after that. By 2000, there were very few large-scale slippages even during the rainy season. The trend owed itself to the policies of the Standing Committee on Campus Geotechnical Matters, set up in 1998, their implementation by the Campus Development Office and the Estates Management Office. For these administrators and professionals, safety was important but something more had to be done.

### **Landscaping Treatment after Slope Works**

Landscaping treatment on stabilized slopes falls roughly into two categories—hard surface and soil surface. Hard surface



往聯合書院沿路的一道石面斜坡,現在長滿了綠葉 A rock surface slope on the road to United College now teems with green

## 安全

1997年,連綿數周的豪雨,

此之後,山泥傾瀉的次數漸減。直至2000年,即使是 雨季,也只有極少數的大規模滑移。這個當歸功於在 1998年成立的校園岩土事務委員會的政策,以及校園 發展處和物業管理處的努力。對於這些行政人員和專 業人士來說,安全是重要的,但仍須努力。

#### 斜坡工程後的景觀處理

斜坡鞏固後,在景觀處理上大致可分為兩類—硬面和 泥面。硬面處理的斜坡包括噴凝土 (透過軟管把凝土 Safe, Green and Beautiful Slapes of the Chinese University 噴在坡面上)、岩床及擋土牆。九十年代的香港,在

措施,大學已逐漸傾向採用其他方法,使效果更賞心 悦目。

## 美化方法

多年來,大學採用各種技術,美化岩土工程的視覺效 果,並盡量在斜坡上種植。例子包括在斜坡和擋土牆 種植裝飾用的灌木和攀緣植物、使用褐土色石面,並 採用諸如覆草法的先進綠化技術。

## 保護樹木

一般以為進行斜坡改善工程一定要移走樹木,其實不 然。舉例説,中大校園便利用泥釘穩定削土坡,減少 干擾樹木。至於需重整的斜坡表面,則有時用樹穴和 坡腳牆來保留樹木。另一個方法是藉挖坑來穩定鬆散 的回填坡,盡量減少移植樹木。耗時較長,部分工序

斜坡維修須持續不斷。天然的斜坡要變得安全, 「安全」的斜坡必須密切監察和保養。當然,並非 所有綠化的斜坡都像伊甸園般茂盛,至少不會是四 時皆綠。校園發展處的土力工程師馬維德表示: 「植被的狀態亦取決於生長的環境。但在模仿自然的 技巧上,大學做得非常出色。」駕車往大學門外 的大埔道,足可見此言非虚。

sprayed with concrete, rock outcrops and retaining structures. In the 90s, shotcreting

(projecting concrete through a hose onto a surface) was the dominant method of surface protection after slope stabilization in Hong Kong. Quick, cheap and effective, it was widely used by the Government. But the shotcrete nozzle is a Vesuvius that mummifies everything within its radius with a layer of white lava. Shotcreted hillsides look lifeless and incoherent. So while the technique was still used to treat dangerous slopes and as an emergency measure, the University shifted its focus to methods that would bring more aesthetically pleasing results.

## **Cosmetic Approaches**

Over the years, the University has adopted an array of techniques to mitigate the visual impact of engineering works and maximize opportunities for vegetation planting on slopes.

Examples include the planting of ornamental shrubs and climbers on slopes and retaining walls, the use of earth-toned masonry facing, and adoption of advanced greening technologies such as mulching.

## **Protection of Trees**

Contrary to common belief, trees do not necessarily have to be removed during slope improvement works. At the University campus, for instance, soil nailing is used to stabilize cut-slopes in order to reduce disturbance to trees, and where the slope surface has to be regraded, tree rings and toe walls are sometimes used to retain trees. Sometimes trench excavation, a more time-consuming and partially manual method of stabilization is used to stabilize loose fill-slopes in order to minimize the need for tree removal.

Slope improvement is an ongoing process. Untreated slopes have to be made safe while stabilized slopes have to be closely monitored and maintained. Admittedly though not all greened slopes resemble the Garden of Eden in bloom, at least not all the time. 'The state of the vegetation depends also on the conditions for growth. But given that this is science trying to mimic nature, the University has fared very well,' said Mr. Arthur Ma, geotechnical engineer in the Campus Development Office. A drive down Taipo Road outside our gates would tell you that. \*



在邵逸夫夫人樓附近的回填坡,是藉挖坑種植來鞏固的。這種方法可盡量減少移植樹 木,部分過程須用人手處理,耗時較長。

A more time-consuming method of stabilization—trench excavation—was used to stabilize this fillslope near the Lady Shaw Building so tree removal can be minimized. Part of the procedure was carried



九十年代在崇基職員宿舍附近蓋滿灰泥護面的斜坡(上圖);同一斜坡的現貌(下圖)。 Before: a slope covered with chunam plaster near Chung Chi staff quarters in the 1990s (top) After: the same slope now (above)

## 要聞快訊 Newsbreak

## 重大維修

為了盡量減少對校園社區的騷擾,校方把重大的校園維修工程集中在夏季進行。三十年來,邵逸夫堂和碧秋樓首 次換上新裝。邵逸夫堂的內部維修已大部分完成,碧秋樓的工程則需持續一段時間。工程進行期間,引起不便之 處,幸得有關人士體諒,大學深表感激,懇祈再稍忍一時,待工程順利完成。

#### 邵逸夫堂

邵逸夫堂建於1981年,獲大學教育資 助委員會資助,在今年暑假大幅翻 新,主要是為該堂興建辦公室。過去, 由於缺乏空間,辦公室只能在後台的 化裝間臨時搭建。維修後, 邵逸夫堂 將有正式的辦公室和較大的化裝間。 工程包括重組空間和擴建支援設施、 装置新的防火和電線系統以提升安全 設備,以及內部粉飾。

擴建工程約需時兩個月,翻新的部分 則很快便可供使用。



#### 碧秋樓

建於約三十年前的碧秋樓(下圖),今夏提升電力系統,包括裝置不間斷電源,以配合由資訊科技服務處策劃的電 腦設施升級。空調系統將予調整,藉着冷氣耗盡前的熱交換作能量回收,以提高能源效益。各個服務部門的空間 亦將重新布局,騰出封閉空間,採用開放設計等,務使地盡其用。基本設施諸如自動噴水滅火系統、管道和排水系 統,以及樓梯等將予改善。工程已於2008年5月啟動,預期在2009年復活節左右完成。

## **Major Renovations**

Major renovations on campus were carried out during the summer in order to minimize disturbance to the campus community. Two buildings, Sir Run Run Shaw Hall and Pi Ch'iu Building received their first facelift in three decades. While the interior renovation of the first project is largely completed, the second one will continue for some time. The University thanks those affected for their tolerance and hopes they can bear with the project for just a little bit longer.

#### Sir Run Run Shaw Hall

Sir Run Run Shaw Hall (above), constructed in 1981, received a much needed overhaul this past summer, with funding from the University Grants Committee (UGC). One important aim was to build offices for the hall. In the past, the hall had had to set up make-shift offices in the dressing room backstage due to lack of space. But after renovations, it will have proper offices and a larger dressing-room. The works mainly involved spatial reorganization and building an extension for supporting facilities, safety enhancement including new fire protection and wiring systems, and interior refurbishment. Except for the extension which will be completed in a couple of months, the new hall will be ready for use very soon.

### Pi Ch'iu Building

Pi Ch'iu Building (below), built some 30 years ago, is upgrading its electrical system. This includes the installation of uninterrupted power supplies to complement the upgrading of computer facilities planned by the ITSC. The air-conditioning systems are also rearranged so energy can be used more efficiently while allowing for energy recovery by means of heat exchange before chilled air is exhausted. There will also be spatial rearrangments among service departments to free up enclosed space, adopt an open plan layout, etc., so that space can be used with greater efficiency. Basic facilities such as sprinkler systems, plumbing and drainage, and staircases are also enhanced during this exercise. The project began in May 2008 and is expected to finish around Easter 2009.



## 新書院院址附近的安全措施

隨着晨興書院和善衡書院的建築工程展開,大學採取新的 安全措施。



大學道近通往五旬節會樓低座路口處,新鋪設了斑馬線 (上圖)。學生在大學道上的巴士站下車後,橫過這條三車 道的大路將更安全。同時,行人從大學道前往五旬節會樓 低座時,可使用一條新鋪的紅磚路,這行人路與建築地盤 之間,有一車路分隔。原有貼近地盤的舊行人路,現已變 成一條有蓋的小徑(下圖)。這些新的設施不但將服務上 述宿舍的住客,亦方便那些欲使用公共升降機前往高座, 然後往大學保健醫療中心或蒙民偉樓的人士。

## Safety Measures near New College Sites

Following the commencement of works on the sites of Morningside College and S.H. Ho College, new safety measures have been adopted. Students disembarking on University Avenue near the driveway leading to Pentecostal Mission Hall Complex Low Block can now cross the three-lane avenue safely—by means of a new zebra-crossing (above). Also, pedestrians heading to the Pentecostal Mission Hall Complex Low Block from University Avenue can use a newly paved redbrick footpath (below, lower left) separated from the construction site by the driveway. And the old footpath adjacent to the site is now turned into a covered walkway (below, lower right). These new structures not only serve residents of the said hostel, but also commuters wishing to take the public lift to High Block and from there, to the University Health Centre or the Mong Man Wai Building.



## 校園發展計劃報告上載

校園發展計劃 (CMP) 顧問公司已完成《首階段持份者交 cmp/b5/以供閱覽。第二階段的持份者交流活動即將展 開,再次期待大學所有成員的持續參與。

## **CMP Report Uploaded**

The consultant of the CMP project has completed the Stage I Stakeholder Engagement Report which is now available on the CMP website at www.cuhk.edu.hk/ *cmp/en/*. The continued participation of all members of the University is important in the second stage of stakeholder engagement which will commence soon.

網上版請閱覽 Web edition available at www.cuhk.edu.hk/iso/sus/